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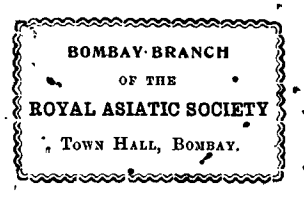

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ETHNOLOGICAL RESEARCHES,

RESPECTING

THE RED MAN OF AMERICA.

INFORMATION

RESPECTING THE

HISTORY CONDITION AND PROSPECTS

OF THE

INDIAN TRIBES of the UNITED STATES:

Collected and prepared under the

direction of the **BUREAU OF INDIAN AFFAIRS** per act of Congress

of March 3rd 1847.

BY HENRY R. SCHOOLCRAFT L.L.D.

Illustrated by

S. EASTMAN, CAPT. U.S. ARMY.

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Part I.

PHILADELPHIA:

LIPPINCOTT, GRAMBO & CO.

INFORMATION,

RESPECTING THE

HISTORY, CONDITION AND PROSPECTS

OF THE

INDIAN TRIBES OF THE UNITED STATES:

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PER ACT OF CONGRESS OF MARCH 3D, 1847,

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PART I.

PHILADELPHIA:
LIPPINCOTT, GRAMBO & COMPANY,
(SUCCESSORS TO GRIGG, ELLIOT & CO.)
1853.

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TO GEN. LEWIS CASS.

LATE MINISTER AT THE FRENCH COURT, SENATOR IN CONGRESS, ETC., ETC., ETC.

SIR: Few men will be able to judge more correctly than yourself of the truthfulness and fidelity of the descriptions of the Indian race presented in this volume. Led, as you were, by the spirit of enterprise, at an early day, to cross the Alleghanies—that prominent boundary, in our geography, which divides the east from the west—these tribes, their manners and customs, their history and languages, were prominently brought to your notice. They have been subjected to your observation for many years, in every possible phasis. You have seen them as hunters, warriors, and councillors, in the changing aspects of peace and war. It has been your province to be brought into close official contact with some of their most distinguished men. You were an actor in the turning conflict of 1812, in which their most energetic modern hero, Tecumseh, fell; and you, as the executive of Michigan, received back to the United States his equally influential brother, the prophet Elsatowa, at a time when the treaty of Ghent had demonstrated the folly and failure of every practical object for which the deluded nations had fought. You have, in the important epoch from 1799 to 1836, witnessed their opposition, often studiously concealed, to the advance of labor, letters, and civilization, in the Mississippi Valley. During this period, Ohio, Louisiana, Mississippi, Alabama, Indiana, Illinois, Missouri, Arkansas, and Michigan have assumed their position as independent State sovereignties.

To no one has the impulsive and unstable character of the tribes—their wild spirit of liberty, blind fanaticism, subtile superstition, false trusts, and wonderful liability of being swayed by ignorant, flimsy, or absurd counsels, plausible but unsound—been more conspicuously and impressively apparent. On no one has the difficult problem of their government and management, under every wish to save them from their fate, been more frequently obtruded, tribe by tribe. More than all, when this early struggle, the literal era of blood on the frontiers, was past, you have witnessed the attempts of writers and reviewers to misrepresent the policy of the government respecting them, and to distort facts of the highest moment in their history and condition. He must, indeed, be ill versed in our literary history, who does not know the eloquent and triumphant efforts of your pen to vindicate the one, and to strip the garb of error from the other.[1]

[1] N. A. Review.

Other events in the thickly crowded period succeeding that I have named—events of European interest—have claimed a fresher place in your memory; they have made a broader and fuller impression on the public mind, and one which is marked by a more refined, but hardly, I think, a more profound policy of dissimulation. Napoleon the Great, has risen and fallen within the period. Louis XVIII., Charles X., Louis Philippe, and, yet more striking, Napoleon III., have appeared on the canvas of Central Europe; yet the Indian tribes, who were deer-hunters and haters of Bible truth, in 1799, when you first crossed the Alleghanies, remain unchanged to this day; a monument almost as unalterable, and far more inscrutable, than the pyramids of Egypt, if for no other purpose, it would seem, yet to operate as a stimulus to our humanities, national virtues, and sense of justice.

Very truly,

HENRY R. SCHOOLCRAFT.

MESSAGE

OF THE

PRESIDENT OF THE UNITED STATES.

To the Senate of the United States:

I transmit herewith a communication from the Department of the Interior, and the papers which accompanied it; being the first part of the results of investigations by Henry R. Schoolcraft, Esq., under the provisions of an Act of Congress, approved March 3d, 1847, requiring the Secretary of War "to collect and digest such statistics and materials as may illustrate the history, the present condition, and future prospects of the Indian tribes of the United States."

MILLARD FILLMORE.

Washington, 10*th August*, 1850.

Department of the Interior,
Washington, *August* 9, 1850.

Sir:

I have the honor to transmit herewith, with the view of their being laid before the Senate, a communication from the Commissioner of Indian Affairs, and the papers which accompany it: viz., a letter from Henry R. Schoolcraft, Esq., together with the manuscripts and drawings; being the first part of results of investigations under the provisions of an Act of Congress, approved March 3d, 1847, requiring the Secretary of War to collect and digest such statistics and materials as may illustrate the history, present condition, and future prospects of the Indian tribes of the United States.

Very Respectfully,

Your Obedient Servant,

D. C. GODDARD,
Secretary *ad interim.*

To the President of the United States.

DEPARTMENT OF THE INTERIOR,
OFFICE INDIAN AFFAIRS,
August 7th, 1850.

SIR:

Under the Act of Congress approved March 3d, 1847, Henry R. Schoolcraft was appointed "to collect and digest such statistics and materials as may illustrate the history, present condition and future prospects of the Indian tribes of the United States."

I have the honor to submit for transmission to Congress, the manuscripts and drawings herewith, — being the first part of the results of Mr. Schoolcraft's investigations, — also a letter from him, explanatory of the nature and extent of his labors, and suggesting the proper course to be pursued in relation to the publication of the work. He naturally feels solicitous as to the correctness and style of the mechanical execution; and in view of the labor, learning, and ability he has devoted to the work, and its nationality of character, I trust his wishes in that respect may be regarded.

Very Respectfully,
Your Obedient Servant,
L. LEA,
COMMISSIONER.

D. C. GODDARD, ESQ.,
Secretary of the Interior, *ad interim*.

WASHINGTON, *July 22d*, 1850.

L. LEA, ESQ.,
Commissioner of Indian Affairs.

SIR:

In conformity with authority confided to me under the provisions of an Act of Congress, approved March 3d, 1847, requiring the Secretary of War "to collect and digest such statistics and materials as may illustrate the history, the present condition, and future prospects of the Indian tribes of the United States," I have the honor to submit to you the first part of the results of my investigations.

Time was required in order to place an inquiry so comprehensive in its character on a proper basis. Misapprehensions on the part of the Indians, with respect to the object of the collection of their statistics, were to be met. The additional duties required of the agents of Indian affairs presupposed so intimate an acquaintance with the history and languages of the tribes and the distinguishing traits of races, that few of this class of officers were prepared to undertake them. The investigation in these particulars was therefore extended to embrace gentlemen of experience, observation, and learning, in various parts of the Union; including numerous teachers and missionaries employed in moral and intellectual labors among them. Facts were, indeed, solicited from all who had facts to communicate.[1]

[1] A copy of the Historical Inquiries, drawn up for this purpose, is inserted as an Appendix to this volume.

Valuable memoirs and communications have been received as the result of these joint measures, official and unofficial, and a mass of information collected which may serve, it is believed, to rescue the topic, in some measure, from a class of hasty and imaginative tourists and writers, whose ill-digested theories often lack the basis of correct observation and sound deduction.

American and European writers have been, to no small extent, misled by these supposititious views, not only respecting the real character of the tribes, but the policy of the government itself in relation to them, has been extensively prejudged and misapprehended. Some of the most able and profound writers, at home and abroad, whose works will, in their main parts, be long cherished, have taken the mere synonyms of tribes, as distinct and separate tribes, playing different parts in history.

The languages which have so many features to be admired in common with the Shemitic plan of thought, to which they must be referred, have been pronounced, on very slender materials, to contain high refinements in forms of expression; an opinion which there is reason to believe requires great modifications, however terse and beautiful the languages are, in their power of combination.

The aboriginal archæology has fallen under a somewhat similar spirit of misapprehension and predisposition to exaggeration. The antiquities of the United States are the antiquities of barbarism, and not of ancient civilization. Mere age they undoubtedly have; but when we look about our magnificent forests and fertile valleys for ancient relics of the traces of the plough, the compass, the pen, and the chisel, it must require a heated imagination to perceive much, if anything at all, beyond the hunter state of arts, as it existed at the respective eras of the Scandinavian and Columbian discoveries.

It has been the practice of some writers, astonished at the isolated monuments of labor and skill, which are manifestly intrusive, to speak of the antiquities of the Mississippi Valley as denoting a high state of ancient civilization in the aboriginal race. But when these vestiges of human labor are attentively studied on a broad scale, in connection with all the attending phenomena, they do not appear to sanction the belief of any high and general state of advance in the race before the arrival of Europeans. This may be emphatically said of the tribes within the territory of the United States, whatever judgment may be formed respecting the ruins of Palenque, Cuzco, Yucatan, and the Valley of Mexico.

A predisposition to admire and wonder in viewing objects of archæological discovery, is not peculiar to this continent, but has stood in the way of sober deduction, founded on an impartial basis of migratory action and reaction in all ages of the world's history.

However these subjects may, in our own land, puzzle and distract inquirers, lying, in some minds, as so many stumbling-blocks in the way of historical truth, it was due to the character of the government, and to a peculiar variety of the race of man,—for such we must regard the Indian tribes,—to place the record from which both their and its actions are to be judged, on grounds of authentic information while the tribes are yet on the stage of action.

It could not have been anticipated in the beginning of the 16th century, that erratic and predatory hordes of hunters, without agriculture, arts, or letters, and with absolutely nothing in their civil polity that merits the name of government, should have been able to sustain themselves; far less, to cope with the European stocks who landed here with the highest type of industrial civilization.

But justice to every period of our history, colonial and sovereign, requires it to be shown that the great duties of humanity have not been constantly performed towards them; that their possessory right to the soil has not been at all times fully acknowledged, and that their capacities for improvement and knowledge have not been attempted to be elicited in every way, and unceasingly cultivated and appealed to.

A continent has been appropriated, in the occupancy of which this race preceded us. For their actual character in peace and war, and capacities for the duties of life; for their history and idiosyncracies; for their arts and habits; their modes of subsistence, and inter-tribal intercourse; for their languages and mental traits and peculiarities, as developed by curious oral recitals and mythologic dogmas and opinions, which carry the mind back to early oriental epochs; for their system of mnemonic symbols, and, in fine, for the general facts that go to establish their nationality and character, posterity will look to the present age for its record, whatever may betide the history of the tribes, or the efforts of humanity in their behalf.

In providing for their enumeration and statistics, Congress has regarded these as indispensable points in the illustration of the main design. How far the inquiries are accomplished in the investigations made, there will be better means of judging when the results shall have been fully presented. The present materials are submitted as a part of the information collected, and will be followed by others as early as the returns and papers can be fully examined and digested.

It will occur to you, sir, that this inquiry is of a national character, and that, in bringing the matter forward, there will be a propriety in permitting the same hand that prepared it to supervise the publication. Many of the papers abound in aboriginal expressions to which no one unacquainted with the languages could do justice. The system of pictography, which is for the first time exhibited, imposes a degree of critical care in the typography which is not ordinarily expected. I have the honor, therefore, to suggest that Congress, to whom I request you will refer this communication, be solicited to order that the present manuscripts and the succeeding parts of them, together with the illustrations and engravings, be printed under the special charge of the Bureau of Indian Affairs, acting for the Library Committee.

Very Respectfully,

HENRY R. SCHOOLCRAFT,

HISTORIOGRAPHICAL AGENT,

Act of 3*d March*, 1847.

PART FIRST.

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II. MENTAL TYPE OF THE INDIAN RACE, - - - - - - - - - A.

III. ANTIQUITIES OF THE UNITED STATES, - - - - - - - A.

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APPENDIX.

INQUIRIES RESPECTING THE HISTORY, PRESENT CONDITION, AND FUTURE PROSPECTS OF THE INDIAN TRIBES OF THE UNITED STATES.

PREFACE.

In 1846, several gentlemen of literary, social, or political eminence, united with the writer of the present work, in a memorial to Congress on the subject of the Indian Tribes; — their history, condition, and destiny, and the "imperfect and fragmentary" state of our information respecting them.*

On the 4th of March, 1847, Congress responded to this appeal in behalf of the Race, by directing the Secretary of War (who, at this period, had the jurisdiction of Indian Affairs†) to collect and digest such statistics, and other information, as were necessary to a full historical understanding of the subject. The Author was honored with a commission to execute this trust, and directed to report the result of his investigations through the Bureau of Indian Affairs. He immediately transferred his residence from New York, to Washington; in order to avail himself of the necessary facilities and sanctions of the office, in the prosecution of the inquiry.

The First Part of the investigations made in pursuance of this appointment, is now submitted. In carrying out the object, while presenting the existing state of the various tribes, it has been sought to group them, by the tie of languages, into generic families, or stocks; and, so far as practicable, to restore those ethnological links in the chain of their history which denote resemblance, and ancient affinities. To do this, not only the principles of the languages are required, but the Indian antiquities and traditions, their physical traits, and the mental type and psychological peculiarities of the Race; which become so many points of comparison, and helps to investigation.

In the examination of the Indian history, great importance has ever been attached to the principles of their languages. The author conceives that he has had unusual opportunities of becoming acquainted with the principles of these ancient mediums of human thought. He has devoted many years of his leisure to these investigations, while residing, in an official capacity, in the West. The theme has been pursued with all the ardor and hopefulness of youth, and the perseverance

* This memorial, with the names, &c., is given in Vol. III., § XV. Statistics and Population.

† Transferred by Act of Congress, in 1849, to the Secretary of the Interior.

of maturer years, passed in the vicissitudes of a frontier life. If, to many, the wilderness is a place of wearisome solitude, to him it assumed, under these influences, far more the semblance of the choicest recesses of an academic study. This study has only been intruded upon by the cares of business, and the higher duties of office; but it has ever been crowned, in his mind, with the ineffable delights that attend the hope of knowledge, and the triumph of research. Thirty years thus spent on the frontiers, and in the forests, where the Red Race still dwells, have exhibited them to his observation in almost every possible development. He has been placed in a variety of situations to observe the structure and capacities of the Indian mind, in its minutest idiosyncracies; to glean his notions of life, death, and immortality; his conceptions of the character and being of a God, who is universally acknowledged as the Creator; and to detect the secret springs of his acts, living and dying. The peculiarly intimate relations the author has held to them (having married a highly educated lady, whose grandfather was a distinguished aboriginal chief regnant, or king,) has had the effect of breaking down towards himself, individually, the eternal distrust and suspicion of the Indian mind, and to open the most secret arcana of his hopes and fears, as imposed by his religious dogmas, and as revealed by the deeply-hidden causes of his extraordinary acts and wonderful character.

The mental type of the aborigines, which has been systematically pursued through the recondite relations of their mythology and religion; their notions of the duality of the soul; their conceptions of a complex spiritual agency affecting man and beast; their mysterious trust in a system of pictographic symbols, believed to have a reflex power of personal influence; and their indomitable fixity in these peculiarities, reveal the true causes, he apprehends, why the race has so long and so pertinaciously resisted, as with iron resistance, all the lights and influences which Europe and America united have poured upon their mind, through letters, arts, knowledge, and Christianity.

The United States has maintained relations with some seventy tribes who occupy the continental area east of the Rocky Mountains. The great practical object, which has at all periods pressed upon the Government, has been the preservation of peace, on the constantly enlarging circle of the frontiers. This effort, basing itself on one of the earliest acts of WASHINGTON, has been unintermitted. Occupying the peculiar relation of a mixed foreign and domestic character, the intercourse has called for the exercise of a paternal as well as an official policy. No people has ever evinced such a non-appreciating sense of the lessons of experience, in the career of their history and destiny; and the problem of their management has still returned to us, to be repeated again — What line of policy is best suited to advance

their prosperity? The present plan of collecting information respecting their actual condition, character, and prospects, is based on an appeal to the entire official organization of the Department on the frontiers; and is believed to be the most efficient one that can be pursued to collect a body of authentic information, which may serve as the record from which the tribes are to be judged. Its results will be communicated as the materials accumulate.

In the consideration of the policy to be adopted with respect to the wild prairie and transmontane tribes, who rove over immense tracts with no sense of dependence or responsibility but that which they daily acknowledge to the bow and arrow, the gun and club,—in the use of which they have acquired great dexterity—and new power by the introduction of the horse; we commend to notice the remarks of Mr. Wyeth, formerly of Oregon, on the best mode to be adopted respecting the shifting and feeble tribes of those latitudes. The faithless and robber-like character of the prairie hordes east of the mountains, is graphically depicted by Mr. Burnet, in his memoir on the Comanches, and by Mr. Fitzpatrick, respecting the Arapahoes and other predatory tribes on the higher Arkansas and Nebraska. Although this character is inapplicable to the more easterly tribes, many of whom are advanced in arts and knowledge, it is yet important to keep it in view in adjusting our policy respecting those remote and lawless tribes.

The experience of two hundred years, with the entire race, demonstrates the delusion of a prosperous Indian nationality, as based on any other system but that of agriculture and the arts. And, it is believed, the sooner the several tribes cease to regard themselves politically as containing the elements of a foreign population, the sooner will the best hopes of their permanent prosperity and civilization be realized. Meantime, while they preserve a pseudo-nationality, it may be affirmed as one of the clearest deductions of statistical and practical investigations into the operation of our laws, and the general principles of population, that nothing beyond the interest of the funds due to the tribes, for lands purchased from them, should continue to be paid as annuities,—while policy requires, that the principal should be devoted, with their consent, wholly to purposes of civil polity, education, and the arts.

With all their defects of character, the Indian tribes are entitled to the peculiar notice of a people who have succeeded to the occupancy of territories which once belonged to them. They constitute a branch of the human race whose history is lost in the early and wild mutations of men. We perceive in them many noble and disinterested traits. The simplicity of their eloquence has challenged admiration. Higher principles of devotion to what they believe to be cardinal virtues no people

ever evinced. Faith has furnished the Christian martyr with motives to sustain him at the stake: but the North American Indian has endured the keenest torments of fire without the consolations of the Gospel. Civilized nations are cheered on their way to face the cannon's mouth by inspiring music; but the warrior of the forest requires no roll of the drum to animate his steps.

Mistaken in his belief in a system of gods of the elements — misconceiving the whole plan of industrial prosperity and happiness — wrong in his conceptions of the social duties of life, and doubly wrong in his notions of death and eternity, he yet approves himself to the best sensibilities of the human heart, by the strong exhibition of those ties which bind a father to his children, and link whole forest communities in the indissoluble bonds of brotherhood. He lingers with affection, but with helpless ignorance, around the dying couch of his relatives; and his long memory of the dead ceases but with life itself. No costly tomb or cenotaph marks his place of burial; but he visits that spot with the silent majesty of grief. God has planted in his heart affections and feelings which only require to be moulded, and directed to noble aims. That impress seals him as a brother, erring, indeed, and benighted in his ways, but still a brother.

To reclaim such a race to the paths of virtue and truth; to enlighten the mind which has been so long in darkness; and to give it new and solid foundations for its hopes, is a duty alike of high civilization and warm benevolence.

To illustrate the work, the pictorial art is, it is conceived, appropriately appealed to; and it is made one of the points relied on to give its pages subsidiary interest and value. This department of American art is placed in charge of Captain S. EASTMAN, U. S. A. — a graduate of West Point Military Academy, and a former Assistant-Professor of Drawing in that Institution; a man, indeed, who has served these twenty years, in peace and war, on the American frontiers, always carrying with him his easel and brushes, to while away leisure moments in camp; and who now returns from the West with his portfolio filled with views of American scenery, and objects of Indian life and art, delineated on the spot, or drawn from specimens.

PHILADELPHIA, December 3, 1850.

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I. GENERAL HISTORY. A.

1. GENERAL HISTORY.

And these are *ancient* things.

I. CHRON. iv. 22.

A. HISTORY; NATIONAL AND TRIBAL.

1. ABORIGINAL history, on this continent, is more celebrated for preserving its fables than its facts. This is emphatically true respecting the hunter and non-industrial tribes of the present area of the United States, who have left but little that is entitled to historical respect. Nations creeping out of the ground — a world growing out of a tortoise's back — the globe re-constructed from the earth clutched in a muskrat's paw, after a deluge, — such are the fables, or allegories, from which we are to frame their ancient history. Without any mode of denoting their chronology, without letters, without any arts depending upon the use of iron tools, without, in truth, any power of mind or hand, to denote their early wars and dynasties, except what may be inferred from their monumental remains, there is nothing, in their oral narrations of ancient epochs, to bind together or give consistency to even this incongruous mass of wild hyperboles and crudities.

Whenever it is attempted, by the slender thread of their oral traditions, to pick up and re-unite the broken chain of history, by which they were anciently connected with the old world, their sachems endeavor to fix attention by some striking allegory or incongruous fiction; which sounds, to ears of sober truth, like attempts at weaving a rope of sand. To impress the mind by extraordinary simplicity, or to surprise it, with a single graphic idea, is quite characteristic of Indian eloquence — whatever be the theme.

Manco Capac, deriving his pedigree from the sun, or Tarenyawagon, receiving his apotheosis from the White Bird of Heaven; Quetzalcoatl, founding the Toltec empire with a few wanderers from the Seven Caves; or Atatarho, veiling his god-like powers of terror with hissing rattle-snakes, fearful only to others; such are the proofs

by which they aim to stay the ill-proportioned fabric of their history, antiquities, and mythology.

2. The native cosmogonists, when they are recalled from building these castles in the air, and asked the meaning of a tumulus, or the age of some gigantic tooth or bone, which remains to attest geological changes in the surface of the continent, answer with a stare! and if they speak at all, they make such heavy drafts upon the imagination, that history never knows when she has made allowances enough on this head.

A mammoth bull, jumping over the great lakes;[1] a grape-vine carrying a whole tribe across the Mississippi;[2] an eagle's wings producing the phenomenon of thunder, or its flashing eyes that of lightning; men stepping in viewless tracks up the blue arch of heaven; the rainbow made a baldric; a little boy catching the sun's beams in a snare;[3] hawks, rescuing shipwrecked mariners from an angry ocean, and carrying them up a steep ascent, in leathern bags.[4] These, or a plain event of last year's occurrence, are related by the chiefs with equal gravity, and expected to claim an equal share of belief and historic attention. Where so much is pure mythologic dross, or requires to be put in the crucible of allegory, there appears to be little room for any fact. Yet there are some facts, against which we cannot shut our eyes.

3. We perceive, in them, if examined by the light of truth, as revealed alike by divine and profane records, a marked variety of the human race, possessing traits of a decidedly oriental character, who have been lost to all history, ancient and modern. Of their precise origin, and the era and manner of their migration to this continent, we know nothing with certainty, which is not inferential. Philosophical inquiry is our only guide. This is still the judgment of the best inquirers, who have investigated the subject through the medium of physiology, languages, antiquities, arts, traditions, or whatever other means may have been employed to solve the question. They are, evidently, ancient in their occupancy of the continent. There are, probably, ruins here, which date within five hundred years of the foundation of Babylon. All history demonstrates, that from that central focus of nationality, nations were propelled over the globe with an extraordinary degree of energy and geographical enterprise. It is well said by a recent and eminent writer, that the foot of man has pressed many a soil, which late travellers assume was never trodden before.[5] We have known this continent but three centuries and a half, dating from 1492. That discovery fell like a thunder-clap. But it is now known that the Scandinavians had set foot upon it, at a long prior date, and had visited the northern part of it, from Greenland, as early as the beginning of the 10th century.[6] Even in the 9th century, we are

[1] Jefferson's Notes.

[2] Heckewelder's History of the Indians.

[3] Oneöta.

[4] Cusic's Ancient History of the Iroquois.

[5] Charles Hamilton Smith's History of the Human Species.

[6] Antiquitates Americana. Copenhagen.

informed, Othere proceeded on a voyage to the North Pole. The brothers Zeni had made important prior discoveries, in the western and northern oceans. Biscayan fishermen were driven off the Irish coasts in 1450, and there is a chart of Andrea Bianca in the Ducal Library at Venice, of 1436, on which the names of Brazil and Antillia occur.

4. But whenever visited, whether in the 9th, 10th, or 15th century, or late in the 16th, when Virginia was first visited, the Indians vindicated all the leading traits and characteristics of the present day. Of all races on the face of the earth, who were pushed from their original seats, and cast back into utter barbarism, they have, apparently, changed the least; and have preserved their physical and mental type, with the fewest alterations. They continue to reproduce themselves, as a race, even where their manners are comparatively polished, and their intellects enlightened; as if they were bound by the iron fetters of an unchanging type. In this unvarying and indomitable individuality, and in their fixity of opinion and general idiosyncracy, they certainly remind the reader of oriental races—of the Shemitic family of man.

5. Viewed in extenso, the race appears to be composed of the fragments of various tribes of men, who bore, however, a general affinity to each other. With some small exceptions, they appear to be parts of a whole. Most of their languages and dialects are manifestly derivative. While they are transpositive and polysyllabic, they are of a type of synthesis more concrete and ancient in its structure than those of Rome and Greece, and exhibit no analogies to those of western and northern Europe, unless it be the Basque and Magyar. But they are philosophically homogeneous in syntax, capable of the most exact analysis and resolution into their original and simple elements; and while some of them impose concords, in reference to a wild aboriginal principle of animate and inanimate classes of nature, they are entirely *una-synthetic.* This subject will be examined in its proper place.

6. As a race, there never was one more impracticable; more bent on a nameless principle of *tribality;* more averse to combinations for their general good; more deaf to the voice of instruction; more determined to pursue all the elements of their own destruction. They are still, as a body, nomadic in their manners and customs. They appear, on this continent, to have trampled on monumental ruins, some of which had their origin before their arrival, or without their participation as builders; though these are apparently ruins of the same generic race of men, but of a prior era. They have, in the north, no temples for worship, and live in a wild belief of the ancient theory of a diurgus, or Soul of the Universe, which inhabits and animates every thing. They recognise their Great Spirit in rocks, trees, cataracts, and clouds; in thunder and lightning; in the strongest tempests and the softest zephyrs; and this subtle and transcendental Spirit is believed to conceal himself in titular deities from human gaze, as birds and quadrupeds; and, in short, he is to be supposed to exist under every possible form in the world, animate and inanimate.

7. While a Great Spirit thus constitutes the pith of Indian theory, the tribes live in a practical state of polytheism; and they have constructed a mythology in accordance with these sublimated views of matter and spirit, which is remarkable for the variety of its objects. To this they constantly appeal, at every step of their lives. They hear the great diurgic Spirit in every wind; they see him in every cloud; they fear him in every sound; and they adore him in every place that inspires awe. They thus make gods of the elements: they see his image in the sun; they acknowledge his mysterious power in fire; and wherever nature, in the perpetual struggle of matter to restore its equilibrium, assumes power, *there* they are sure to locate a god.

8. This is but half their capacity of stout belief. The Indian god of North America exists in a dualistic form; there is a malign and a benign type of him; and there is continual strife, in every possible form, between these two antagonistical powers, for the mastery over the mind. They are in perpetual activity. Legions of subordinate spirits attend both. Nature is replete with them. When the eye fails to recognise them in material forms, they are revealed in dreams. Necromancy and witchcraft are two of their ordinary powers. They can, in a twinkling, transform men and animals. False hopes and fears, which the Indian believes to be true, spring up on every side. His notions of the spirit-world exceed all belief; and the Indian mind is thus made the victim of wild mystery, unending suspicion, and paralyzing fear. Nothing could make him more truly a wild man.

9. It is a religion of woods and wilds, and involves the ever-varying and confused belief in spirits and demons, gods of the water and gods of the rocks, and in every imaginable creation of the air, the ocean, the earth, and the sky,—of every possible power, indeed, which can produce secret harm or generate escape from it. Not to suffer, with the Indian, is to enjoy. Not to be in misery from these unnumbered hosts, is to be blest. He seems, indeed, to present the living problem of a race which has escaped from every good and truthful influence, and is determined to call into requisition every evil one, to prevent his return to the original doctrines of truth; for he constantly speaks, when his traditions are probed, of having lived in a better state; of having spoken a better and purer language, and of having been under the government of chiefs who exercised a more energetic power. Such, at least, I have found the tone of the Algonquin mind, during a long residence among them.

B. ORIGIN.

1. Where such a race can be supposed to have had their origin, history may vainly inquire. It probably broke off from one of the primary stocks of the human race, before history had dipped her pen in ink, or lifted her graver on stone. Herodotus is silent; there is nothing to be learned from Sanconiathus and the fragmentary ancients. The cuneiform and the Nilotic inscriptions, the oldest in the world, are

mute. Our Indian stocks seem to be still more ancient. Their languages, their peculiar idiosyncrasy, all that is peculiar about them, denote this.

2. Considered in every point of view, the Indian race appears to be of an old—a very old stock. Nothing that we have, in the shape of books, is ancient enough to recal the period of his origin, but the sacred oracles. If we appeal to these, a probable prototype may be recognised in that branch of the race which may be called Almogic,[1] a branch of the Eber-ites; to whom, indeed, the revelation was not made, but who, as co-inhabitants for many ages of the same country, may be supposed to have been more or less acquainted with the fact of such revelation. Like them, they are depicted, at all periods of their history, as strongly self-willed, exclusive in their type of individuality, heedless, heady, impracticable, impatient of reproof or instruction, and strongly bent on the various forms of ancient idolatry. Such are, indeed, the traits of the American tribes.

3. What may be regarded, in their traditions of the world, their origin, and their opinions of man, as entitled to attention, is this. They believe in a supreme, transcendental power of goodness, or Great Merciful Spirit, by whom the earth, the animals, and man were created; also, in a great antagonistical power, who can disturb the benevolent purposes of the other power. This person they call the Great Evil Spirit. The belief in this duality of gods is universal.

4. They relate, generally, that there was a deluge at an ancient epoch, which covered the earth, and drowned mankind, except a limited number. They speak most emphatically of a future state, and appear to have some confused idea of rewards and punishments, which are allegorically represented.

5. They regard the earth as their cosmogonic mother, and declare their origin to have been in caves, or in some other manner within its depths. The leading dogma of their theology is, however, that a future state is destined to reward them for evils endured in this; and that the fates of men are irrevocably fixed, and cannot be altered, except, it may be, by appeals to their seers, prophets, or jossakeeds, which finally, if we are to judge by the stolidity of an Indian's death, they entirely forget, or appear to have no faith in.

They declare themselves generally to be aborigines. Pure fables, or allegories, are all that support this. By one authority, they climbed up the roots of a large vine, from the interior to the surface of the earth;[2] by another, they casually saw light, while underground, from the top of a cavern in the earth.[3] In one way or another, most of the tribes plant themselves on the traditions of a local origin. Seeing many quadrupeds which burrow in the earth, they acknowledge a similar and mysterious relation. Tecumseh affirmed, in accordance with this notion, that the earth was his

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[1] From Almodad, the son of Joktan

[2] Breckenridge's Voyage up the Missouri.

[3] Oneöta, p. 207.

mother; and Michabou held that the birds and beasts were his brothers. A few of the tribes, north and south, have something of a traditional value to add to these notions, expressive of an opinion of a foreign origin. This, as gleaned from various authors, will be now particularly mentioned.

6. These ideas, which vary greatly in different tribes, are mingled with fables and beliefs of the grossest absurdity. To separate tradition from mythologic belief, in the chaos of Indian intellect, has some resemblance to the attempt of a finite hand to separate light from darkness. The overflow of waters on the earth having been narrated, an event, by the way, which they attribute to the Great Evil Spirit, their traditions skip over thousands of years, which they fill up as an epoch of mythology. In this, monsters, giants, spirits, genii, gods, and demons, wield their powers against each other, and fill the world with cannibalism, murders, and complicated fears and horrors. Buckland himself could not desire a fairer field for one big saurian to eat up another; but the era is wholly spoiled for the geological warfare of monsters, by making man live on earth at the same time, and exposing him to all the horrible mutations and mutilations of the tooth and claw era. The Algonquin Indians indeed say, in accordance with geological theory, that the animals at first had the rule on earth, and that man came in as a later creation.

7. One of the chief features of this epoch of monstrosities, in each leading family of American Tribes, is the tradition of some great hero, giant-killer, or wise benefactor, whose name is exalted as a god, and to whose strength, wisdom, or sagacity, they attribute deliverance. Such is Quetzalcoatl among the Toltecs and Aztecs; Atahentsic, Atatarho, and Tarenyawagon, among the Iroquois, and Micabo, or the Great Hare, popularly called Manabozho, among the Algonquins.

8. The next thing that is heard, in their history of the world, is accounts, variously related, of the arrival of Europeans on the coast, about the end of the 16th century. From that era to the present day, is, with the exceptions below recited, the period of authentic tradition. Most of the tribes possess traditions of the first appearance of white men among them, and some of them name the place. The Lenni Lenapes and Mohicans preserve the memory of the appearance and voyage of Hudson, up the river bearing his name, in 1609. The Iroquois have the tradition of a wreck, apparently earlier, on the southern coast; and the saving, and, after a time, the extinction of the infant colony in blood. This possibly may be the first colony of Virginia, in 1588. The Algonquins have a tradition of Cartier's visit to the St. Lawrence, in 1534, and call the French, to this day, People of the Wooden Vessel, or Wa-mitig-oazh.. The Chippewas affirmed (in 1824) that seven generations of men had passed since that nation first came in to the lakes.[1]

[1] If 1608, the period of the settlement of Canada, be taken as the era, and thirty years allowed to a generation, this is a remarkable instance of accuracy of computation.

C. TRADITIONS OF THE ANTE-COLUMBIAN EPOCH.

On this subject, we are confined to narrow limits. Three or four of the chief stocks now between the Equinox and the Arctic Circle, have preserved traditions which it is deemed proper to recite.

1. In the voyages of Sir Alexander Mackenzie among the Arctic tribes, he relates of the Chepeweyans, that "they have a tradition that they originally came from another country, inhabited by very wicked people, and had traversed a great lake, which was narrow and shallow, and full of islands, where they had suffered great misery, it being always winter, with ice and deep snow."[1] In a subsequent passage, p. 387, he remarks —"Their progress (the great Athapasca family) is easterly, and according to their own tradition, they came from Siberia; agreeing in dress and manners with the people now found upon the coasts of Asia."

2. The Shawanoes, an Algonquin tribe, have a tradition of a foreign origin, or a landing from a sea voyage. John Johnston, Esq., who was for many years their agent, prior to 1820, observes, in a letter of July 7th, 1819, published in the first volume of Archæologia Americana, p. 273, that they migrated from West Florida, and parts adjacent, to Ohio and Indiana, where this tribe was then located.

"The people of this nation," he observes, "have a tradition that their ancestors crossed the sea. They are the only tribe with which I am acquainted, who admit a foreign origin. Until lately, they kept yearly sacrifices for their safe arrival in this country. From where they came, or at what period they arrived in America, they do not know. It is a prevailing opinion among them, that Florida had been inhabited by white people, who had the use of iron tools. Blackhoof (a celebrated chief) affirms that he has often heard it spoken of by old people, that stumps of trees, covered with earth, were frequently found, which had been cut down by edged tools."

At a subsequent page, he says—"It is somewhat doubtful whether the deliverance which they celebrate has any other reference, than to the crossing of some great river, or an arm of the sea." (P. 276, Arch. Am., Vol. I.)

3. The next testimony is from Mexico. Montezuma told Cortez of a foreign connection between the Aztec race and the nations of the Old World.

This tradition, as preserved by Don Antonio Solis, led that monarch to assure the conqueror of a relationship to the *Spanish*[2] crown, in the line of sovereigns.

His speech is this:—"I would have you to understand before you begin your discourse, that we are not ignorant, or stand in need of your persuasions, to believe that the great prince you obey is descended from our ancient Quetzalcoatl, Lord of the

[1] Mackenzie, CXII. Introd.

[2] This was of course entitled to no weight whatever, except as denoting a foreign origin.

Seven Caves of the *Navatlaques*, and lawful king of those seven nations which gave beginning to our Mexican empire. By one of his prophecies, which we receive as an infallible truth, and by a tradition of many ages, preserved in our annals, we know that he departed from these countries, to conquer new regions in the East, leaving a promise, that in process of time, his descendants should return, to model our laws, and mend our government." [1]

4. The general tradition of the nation, of their having originated in another land, and their migration by water, is preserved in the ideographic map of Botturini.[2]

By the accompanying Plates (1 and 2) they describe pictographically their first landing from Aztlan. This place is depicted as an island, surrounded on three sides by the sea. It has the representative sign of six principal houses, with a temple surmounted with the usual emblem of their priesthood; and with a king and queen, or chief and chieftainess. The former has a shoulder-knot, and long garments; the latter a looking-glass, with her hair in two front knots, and her feet drawn backwards, *à la mode de savage*. Both are sitting. The next figure is a man in a boat, with flowing hair, and a long garment. This drawing typifies the passage. It is evidently a landing, and not a departure.

Agreeably to the authors who urge the remotest date, this landing took place A. D. 1038. Others think 1064. The Aztecs began to count their chronology, or tie up their years, as they term it, in 1 Tecpatl of their system of cycles. (109.) Their first residence was at Colhuacan, the Horn mountain, where there were eight chiefs, each denoted by his peculiar family badge, or what the Algonquins call *totem*. From this, the persons charged with carrying their idol, and sacerdotal apparatus, set forward, passing down the Pacific coast. In this journey they spent twenty-eight years, to 2 Calli of their first cycle. During this time they had made three removes, reached the tropics, where they found fruits, growing upon trees, whose trunks were so large, that a man could hardly span them. They took three prisoners, who were sacrificed by their priests, by tearing out their hearts, in the same barbarous manner that was observed after this people became masters of Mexico. From this latter period, their chronology is carefully recorded. They made twenty-two removes, abiding various periods from four to twenty years at a place, making altogether one hundred and eighty-six years; till they reached the valley of Mexico. Agreeably to Clavigero, they reached Zampango in 1216, and migrated to Tizayocan in 1223.

It is seen that while they dwelt at Chepoltepec, or the Locust Mountain (No. 20), they took prisoners, who were dragged before their chief magistrate. These prisoners

[1] History of the Conquest of Mexico. Book iii. p. 61.

[2] First published in 1839 by Mr. John Delafield, Jr., at Cincinnati.

were of the wild hunter tribes, and are depicted as wearing the simple *azian*[1] of modern days.

5. That the Aztecs were not *aborigines*, or the first inhabitants of the country, is proved by this fact. These prisoners are represented to be of both sexes. The males are quite naked, except the above-named garment, and both sexes are without shoes, whereas the conquerors are always, and in all positions, depicted with large shoes, except in the first figures on an island. These have large bows, resembling in their *dimensions* the Chinese shoe of the present time. They are also depicted with a doublet, while the captives are naked.[2]

6. By the codex Tellurianus and the codex Vaticanus, which have been made accessible by the publication of Lord Kingsborough, it is perceived that there was no Aztec ruler at all, by the name of Quetzalcoatl, during the term of their supremacy. Quetzalcoatl was a Toltec. Montezuma, in speaking of the LORD of the SEVEN CAVES, probably referred to an earlier period of their general history. There can be no pretence set up, indeed, that the Aztecs were aboriginals. They found a strong monarchy, under the Toltecs, to whom they became tributary; and these latter acknowledge the rule of the Olmecs before them, which Ferdinand D'Alva traces to the third century. All three tribes spoke kindred dialects. It was not, in fact, till A. D. 1399, when the Aztecs had been one hundred and eighty-three years, by their own account, in the valley of Anahuac, that they resolved to set up for themselves, and elected Ocampichtli emperor. Their whole era of rule, prior to the final conquest by Cortez, in 1520, had been but one hundred and twenty-one years. This story is told by their picture writings, which have been elaborately examined by the late Hon. Albert Gallatin, in the first volume of the Transactions of the American Ethnological Society.

7. It must be recollected that Montezuma ascribed the beginning of the Mexican

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[1] Algonquin. An *azian* is a simple loin cloth.

[2] REFERENCES TO PLATES 1 AND 2:—

1. - - - ilhuitl — cacan . chiamoztoc.
2. panhualaque.
3. Colhuacan.
4. chimalman.
5. quetzalitl.
6. cuauhcohuatt.
7. Cohuatt.
8. oncā quitlamamlique — njxtcoal.
9. oncān quinnotz njxtcoal.
10. cuextecatl — Chocayan.
11. Cohuatl — camac.
12. Azcapotzalco.
13. acalhuacan.
14. Ecatipu.
15. Cohuatitlan.
16. tecpalocan.
17. } pantitlan.
18. }
19. Atlacuihua:
20. Chapoltepec.
21. Chimalaxocl.
22. Huitzilihuitl.
23. Coxcoxth.
24. Colhuacan.

empire to Quetzalcoatl, of Navatlaques, lawful chief of the seven bands, who had originated there. It was to this prince, who had, at an ancient era, mysteriously left them, and gone to the East, as the tradition ran, that the Aztecs attributed the origin of the Spanish monarchy, which made them the more ready, at first, to submit to their conquerors. They expected a succession or restoration of the empire to the descendants of a legitimate monarch. But when the Aztecs found their mistake, they rallied under Gautimozin, and put forth all their powers of resistance.

8. The tradition of the origin of the empire in bands of adventurers from the Seven Caves, rests upon the best authority we have of the Toltec race, supported by the oral opinion of the Aztecs in 1519. An examination of it by the lights of modern geography, in connection with the nautical theory of oceanic currents and the fixed courses of the winds in the Pacific, gives strong testimony in favor of an early expressed opinion in support of a migration in high latitudes. It is now considered probable that those caves were seated in the Aleutian Chain. This chain of islands connects the continents of Asia and America at the most practicable points; and it begins precisely opposite to that part of the Asiatic coast north-east of the Chinese empire, and quite above the Japanese group, where we should expect the Mongolic and Tata hordes to have been precipitated upon those shores. On the American side of the trajet, extending south of the peninsula of Onalasca, there is evidence, in the existing dialects of the tribes, of their being of the same generic group with the Toltec stock. By the data brought to light by Mr. Hale, the ethnographer to the United States Exploring Expedition under Captain Wilkes, and from other reliable sources, the philological proof is made to be quite apparent. The peculiar Aztec termination of substantives in *tl*, which was noticed at Nootka Sound, and which will be found in the appended specimens of the languages of Oregon, furnished by Mr. Wyeth, are too indicative, in connection with other resemblances in sound, and in the principles of construction, noticed by Mr. Hale, to be disregarded.

9. In seeking the facts of modern geography and nautical science on the probability of such an origin for the Indian population of Central and Mexican North America,—not the tribes of the Andes,—the observations accumulated on the meteorology and currents of the Pacific and Indian seas, at the National Observatory, have furnished a new point of light. Lieutenant-Colonel Charles Hamilton Smith, of Edinburgh, author of the most recent,[1] and, in many respects, the best reasoned treatise on the Natural History of the Human Species, appears to have been the first observer to throw out the idea of the Chichimecs—a rude Mexican people of the Toltecan lineage—having migrated from this quarter, taking, however, the word "Caves" to be a figure denoting a vessel, catamaran, or canoe; and not employing it in a literal sense.

Lieut. M. F. Maury U. S. N., the chief director of the American Nautical Observatory

[1] 1848.

at Washington, to whom I transmitted the work, with particular reference to this chapter, puts a more literal construction on the tradition of Quetzalcoatl, and brings to bear an amount of modern observation on the point, which it would be unjust to withhold from the reader.

10. "I have received," he remarks, "your letter of the 14th, [Jan. 1850,] and read with interest the passages you were so kind as to mark between pp. 232 and 261, 'Natural History of the Human Species, by Col. Hamilton Smith.'

"Pray accept my thanks for this gratification.

"At page 261, the Colonel had a stronger case than he imagined. Referring to the Chichimec legend of the seven 'caves,' he conjectures that the Chichimecs might originally have been Aleutians, and that '*caves*,' if not denoting islands, might have referred to canoes.

"The Aleutians of the present day *actually live in caves*, or subterranean apartments, which they enter through a hole in the top. They are the most bestial of the species. In their habits of intercourse they assuredly copy after the seal and the whale.

"Those islands grow no wood. For their canoes, fishing implements, and *cave*-hold utensils, the natives depend upon the drift-wood which is cast ashore, much of which is *camphor* wood. And this you observe is another link in the chain—which is growing quite strong—of evidence which for years I have been seeking, in the confirmation of a 'gulf-stream' near there, and which runs from the shores of China over towards our north-west coast.

"But I am telling things you already know, and about which you did not ask; and lest you should style me a *fast witness*, I'll answer as best I can your several interrogatories.

"1st. You wish me to state whether, in my opinion, the Pacific and Polynesian waters could have been navigated in early times—supposing the winds had been then as they now are—in balsas, floats, and other rude vessels of early ages.

"Yes; if you had a supply of provision, you could 'run down the trades' in the Pacific, on a log.

"There is no part of the world where nature would tempt savage man more strongly to launch out upon the open sea with his bark, however frail.

"Most of those islands are surrounded by coral reefs, between which and the shore the water is as smooth as a mill-pond.

"The climate and the fish invite the savage into the water, and the mountains which separate valley from valley, in many of these islands, together with the powerful vegetable activity, make it more easy for the native to go from valley to valley by water than by land; for the scoriæ on the mountains, with the bramble by the way, offer barriers to those *naked* people that are almost impassable.

"On the other hand, there is the refreshing water, the smooth bay, the floating log, or even the unhusked cocoa-nut, to buoy him along. I have seen children there, not

more than three years old, swimming off to the ship, simply with a cocoa-nut to hold by.

"This voyage accomplished, there is the island in the distance to attract and allure; and the next step would be—if we imagine an infant colony on an island of a group—to fit out an expedition to some of those to leeward.

"The native then finds a hollow log, that is split in two. Like children here, he has dammed up his little mountain streamlets with a dam of clay across. He does the same with his trough, kneading the clay and making a dam with it across either end. He puts in a few cocoa-nuts, a calabash of water, breaks a green branch thick with foliage, sticks it up for a sail, and away he goes before the wind, at the rate of three or four miles the hour. I have seen them actually do this, their little fleets like 'Birnam wood coming to Dunsinane' by water. But by some mishap, in the course of time, this frail bark misses the island or falls to leeward: the only chance then is to submit to the winds and the waves, and go where they will bear.

"But the South Sea Islander would soon get above vessels with clay bows and mud sterns.

"I visited the Marquesas Islands in 1829. The natives were then in the fig-leaf state; and the old chief offered to make me their king, if I would stay with them. Pardon the episode: I'll try to stick to your question; though you have led me where there are so many flowery paths, I find it difficult to withstand the temptation of bolting right off into some of them.

"The Marquesas Islanders make large canoes out of little slats of wood;—each man has a slat. At the end of the voyage he carries his piece home with him. When the canoe is wanted for another voyage, every man comes down with his timber.

"You have seen bread-trays in the negro cabins of the South and West, after having been split, sewed together with white oak splits? In this way their canoes are sewed together with cords of cocoa-nut fibre, and the holes puttied up with clay. These canoes will sometimes hold twenty rowers. They perform regular voyages among the islands of the group; and from other islands they go off to greater distances.

"In the Pacific, between the Equator and 25° or 30° S., it is easy for such vessels to sail in any direction between north around by the west, to south-west and north of the Equator, to the 25th or 30th parallel. It is likewise easy for such rude vessels to sail in any course between north-west around by the west, to south.

"It is difficult to get to the eastward, within the trade-wind region.

"In reply to your second question, as to the possibility of long voyages before the invention of the compass, I answer that such *chance* voyages were not only possible, but more than probable.

"When we take into consideration the position of North America with regard to

Asia, of New Holland with regard to Africa, with the winds and currents of the ocean, it would have been more remarkable that America should not have been peopled from Asia, or New Holland from Africa, than that they should have been.

"Captain Ray, of the whale-ship Superior, fished two years ago in Behring's Straits. He saw canoes going from one continent to the other.

"Besides this channel, there is the 'gulf-stream,' like the current already alluded to from the shores of China. Along its course, westerly winds are the prevailing winds; and we have well-authenticated instances in which these two agents have brought Japanese mariners in disabled vessels over to the coasts of America.

"Now look at the Indian Ocean, and see what an immense surface of water is exposed there to the heat of the torrid zone, without any escape for it, as it becomes expanded, but to the South.

"Accordingly, we have here the genesis of another 'gulf-stream,' which runs along the east coast of Africa.

"The physical causes at work, were there not some other agents, such as the form of the bottom, the configuration of the land, opposing currents of cold water, &c., would give the whole of this current a south-easterly direction.

"We know that a part of it, however, comes into the Atlantic by what is called the Lagullas current. The whales, whose habits of migration, &c., I am investigating, indicate clearly enough the presence of a large body of warm water to the south of New Holland.

"This is where the gulf-stream from the Indian Ocean ought to be; and there I confidently expect, when I come to go into that part of the ocean with the thermometer, as we are preparing to do with our thermal charts, to find a warm current coming down from Madagascar and the coast of Africa.

"There was then in the early ages the island of Madagascar to invite the African out with his canoe, his raft, or more substantial vessel. There was this current to bear him along at first at the rate of nearly, if not quite, one hundred miles a day, and by the time the current began to grow weak, it would have borne him into the region of westerly winds, which, with the aid of the current, would finally waft him over to the southern shores of New Holland. Increasing and multiplying here, he would travel north to meet the sun, and in the course of time he would extend himself over to the other islands, as Papua and the like.

"If I recollect aright, the Gallipagos Islands, though so near the coast, and under the line, with a fine soil and climate, were, when discovered, uninhabited. Now that part of the coast near which they are, is peculiarly liable to calms and baffling winds, to the distance out to sea of several hundred miles: there was no current to drift, nor wind to blow the native from the coast, and lodge him here.

"From present knowledge of currents it can be hardly justified in the supposition that South America was peopled from Asia by vessels being driven south of the

Equator to the American shores. The distance by that route—west wind region south of the S. E. trades—is not less than 10,000 miles, without any islands, except New Zealand, for a resting-place. The route by the Aleutian Islands with the North Pacific 'Gulf Stream' already mentioned, is a much more probable route.

"When we look at the Pacific, its islands, the winds and currents, and consider the facilities there that nature has provided for drifting savage man with his rude implements of navigation about, we shall see that there the inducements held out to him to try the sea are powerful. With the bread-fruit and the cocoa-nut—man's natural barrels there of beef and bread, and the calabash, his natural water-cask, he had all the stores for a long voyage already at hand. You will thus perceive the rare facilities which the people of those shores enjoyed in their rude state for attempting voyages."

11. Thus we have traditionary gleams of a foreign origin of the race of the North American Indians, from separate stocks of nations, extending at intervals from the Arctic Circle to the Valley of Mexico. Dim as these traditions are, they shed some light on the thick historical darkness which shrouds the period. They point decidedly to a foreign—to an oriental, if not a Shemitic, origin. Such an origin has from the first been inferred. At whatever point the investigation has been made, the eastern hemisphere has been found to contain the physical and mental prototypes of the race. Language, mythology, religious dogmas—the very style of architecture, and their calendar, as far as it is developed, point to that fruitful and central source of human dispersion and nationality.

It is no necessary consequence, however, of the principles of dispersion, that it should have been extended to this continent, as the result of regular design. Design there may indeed have been. Asia and Polynesia, and the Indian Ocean, have abounded, for centuries, with every element of national discord. Pestilence or predatory wars, have pushed population over the broadest districts of Persia, India, China, and all Asia. The isles of the sea have been the nurseries of nations. Half the globe has been settled by differences of temperature, oceanic currents, the search of food, thoughtless adventure, or other forms of what is called mere accident, and not purposed migrations. All these are so many of the ways of Providence by which not only the tropical and temperate regions, but the torrid and arctic zones, have been peopled. He must have read history with a careless eye, who has not perceived the work of human dispersion to have been promoted by the discords of various races, and the meteorology of the globe, as affecting its leading current of winds and waves.

But there is a class of inquirers who are not disposed to see the will of a supreme and guiding intelligence in all this—who are prone to see the laws of species invaded—who lay very great stress on natural development, who are ready to explain how even planets are formed from nebulæ, and regard the whole system of nature as endowed

with the capacity of increasing the number of its organic forms.[1] To such transcendental reasoning, the Indian may be deemed a new species, not a new variety of man — differing wholly in his mental and physical type from the Red man of the east — differing, in fact, in his physiology and psychology, from every thing but himself.

He has been found to possess the elements of a peculiar character; latitude and longitude have much affected his manners and customs; food and climate have produced very marked varieties of the race; his very lexicography and principles of grammatical utterance have been affected: but these changes have not produced a new species.

It is in this view that the subject of inquiry has been invested with new interest, which has led me to scrutinize their traditions the more diligently; and it imparts an additional impulse to the following paper, in which some considerations are offered as the immediate result of the preceding examinations on the derivative opinions, theology, and mental type of the race, viewed as a distinct variety of the human species.

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[1] This allusion to the class of philosophers who coincide in the views of the author of the "Vestiges of Creation" will not, it is hoped, be deemed out of place.

II. MENTAL TYPE OF THE INDIAN RACE. A.

II. THE MENTAL TYPE OF THE INDIAN RACE.

A. GENERIC VIEWS.

1. Has the race claims to a peculiarity of type?
2. Sun worship.
3. Sacred fire.
4. Oriental doctrine of Good and Evil.
5. Idea of the germ of creation under the symbol of an egg.
6. Doctrines of the Magi.
7. Duality of the soul.
8. Metempsychosis.
9. Omens from the flight of birds.
10. Images and omens drawn from the sky.
11. Indian philosophy of Good and Evil.
12. Theology of the Indian jugglers and hunter priests.
13. Great antiquity of oriental knowledge.
14. Nature and objects of Brahminical worship.
15. Antiquities of America.
16. Antiquities of the United States.
17. Antiquity of philological proof.
18. Hindoo Theology.
19. Eternity of life.
20. Difficulty of comparing savage and civilized nations.
21. A dualistic deity.
22. Worship of the elements. Transmigration.
23. What stock of nations?
24. Cast. Incineration of the body.
25. Offerings to ancestors.
26. Offerings at meals, or on journeys.
27. Parallelism of idolatrous customs among the Jews.
28. Extreme antiquity of Hindoo rites.
29. Indian languages. Shemitic.

30. Manners and customs. Mongolic.
31. Conclusions of the early Anglo-Saxons.
32. Permanency of the physiological type.
33. Mental type non-progressive.
34. Proof of orientalism from astronomy.
35. Proof from Aztec astronomy.

1. Do the traits we have been contemplating tend to establish for the Indian mind and character a type of race which may be deemed as peculiar? It may further the end in view, to examine this question by the light of their religious and psychological notions and dogmas; their mythology, and their conceptions of a Deity. They have also, in the Toltecan group, a calendar and system of astronomy, and a *style* of architecture, which are eminently calculated to arrest attention. More than all, the tribes over the whole continent possess a class of languages, which, by their principles of grammatical construction, though running through great changes, vindicate claims to philosophical study.

2. Are their traits, opinions, and idiosyncrasies, indigenous or American; or are they peculiar to the Indian mind as developed on this continent; and not derivative from other lands? If so, in what do their original conceptions of art or science, religion or opinion, consist?

Not in the adoration, or worship of the Sun, certainly!

That idolatrous practice had its origin in Persia, Mesopotamia, and Chaldea; whence it spread, east and west, nearly the world over. The worship of the Sun and Moon is mentioned by Job, and was the prevalent idolatry of the land of Uz. It is also seen that this form of idolatry was charged among the sins of the Jews, in the days of Ezekiel, as having been introduced secretly in the temple worship at Jerusalem. (Ezekiel viii. 16.)

Oblations and public thanksgivings were decreed at Rome to the Sun, which was installed among the multiform gods of that empire. (Tacitus, Vol. III., p. 242.)

Fire was deemed by the followers of Zoroaster as a symbol of the Deity. That philosopher admitted no other visible object of worship. It was alone the supreme emblem of divine intelligence.[1]

Nothing is more notorious than the former prevalence of this worship among the Peruvian and Mexican tribes; where, however, it was mixed with the practice of human sacrifices, and the grossest rites. The Aztecs made offerings to the Sun upon the highest teocalli, and sung hymns to it. Sacred fire was supplied alone by the priesthood, and it was the foundation of their power.[2]

North of the Gulf of Mexico, the doctrine prevailed with more of its original oriental

[1] Gowan's Ancient Fragments, p. 135.

[2] Prescott's Conquest of Mexico.

simplicity, and free from the horrid rites which had marked it in the valley of Anahuac, and among the spurs of the Andes.

The tribes of the present area of the United States would admit of no temples, but made their sacred fires in the recesses of the forest. They sung hymns to the Sun as the symbol of the Great Spirit.[1] Such is their present practice in the forests. They were guilty, it is true, at all periods of their history, of shocking cruelties to prisoners taken in war, but they never offered them as sacrifices to the Deity.

3. They never use common fire for uncommon purposes.[2] Sacred fire is extracted on ceremonial occasions by percussion; most commonly with the flint.[3] Opwáguns, or pipes, with the incense of tobacco, are thus lighted whenever their affairs, or the business in hand, is national, or relates to their secret societies. This object, so lighted, is first offered by genuflections to the four cardinal points, and the zenith. It is then handed by the master of ceremonies to the chiefs and public functionaries present, who are each expected to draw a few whiffs ceremonially. Sir Alexander Mackenzie has well described this ceremony at page 97 of his Voyages.

In this primitive practice of having no temples for their worship, extracting their sacred fire for ceremonial occasions by percussion, and keeping their worship up to its simple standard of a sort of transcendentalism, as taught by the oriental nations, to whom we have referred, the Indian tribes of the United States indicate their claims to a greater *antiquity* than those of the southern part of the continent. They appear to have been pushed from their first positions by tribes of grosser rites and manners.

"The disciples of Zoroaster," says Herodotus, "reject the use of temples, of altars, and of statues; and smile at the folly of those nations who imagine that the gods are sprung from, or bear any affinity with the human nature. The tops of the highest mountains are the places chosen for their sacrifices. Hymns and prayers are the principal worship. The Supreme God, who fills the wide arch of heaven, is the object to which they are addressed."[4]

4. Take another of their dogmas, and try whether it has the character of an original or derivative belief. We allude to the two principles of Good and Evil, for which the Iroquois have the names of Inigorio, the Good mind, and Inigohahetgea, or the Evil mind. (Vide Cusic's Ancient History of the Six Nations; also the Wyandot tradition of Oriwahento.)[5] This is one of the earliest oriental beliefs. It was one of the leading dogmas of Zoroaster. Goodness, according to this philosopher, is absorbed in light;

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[1] See specimens among the pictographic writings in the sequel.

[2] Mackenzie.

[3] The Iroquois used an apparatus for giving velocity to a turning upright stick, on a ba Dä-ya-yä-dä-ga-ne-at-hä. (See the Third Report of the Regents of the New York University, on the State Collection of Natural History, Antiquities, &c. Paper by Lewis H. Morgan, Esq., p. 88.)

[4] Herodotus.

[5] Oneöta, p. 208.

Evil is buried in darkness. Ormusd is the principle of benevolence, true wisdom, and happiness to men. Ahriman is the author of malevolence and discord. By his malice he has long pierced the *egg of Ormusd;* in other words, has violated the harmony of the works of creation.[1]

Gibbon informs us that the doctrines of Zoroaster had been so greatly corrupted that Artaxerxes ordered a great council of the magi to revise them, by whom it was settled on the basis of the two great and fundamental principles denoted.[2]

The North American tribes of our latitudes appear to have felt that the existence of evil in the world was incompatible with that universal benevolence and goodness which they ascribe to the Merciful Great Spirit. Iroquois theology meets this question: they account for it by supposing, at the creation, the birth of two antagonistical Powers of miraculous energy, but subordinate to the Great Spirit, one of whom is perpetually employed to restore the discords and mal-adaptations, in the visible creation, of the other.[3]

The earliest notice we have of this doctrine, among the United States tribes, is in the journal of a voyage to North America in 1721 by P. de Charlevoix, (Vol. 2, page 143,) in which he mentions the theology of the Iroquois, the descent of Atahentsic, and the birth of the antagonistical infants. It is more fully stated by Cusic, in 1825, and by Oriwahento, in 1837, as above referred to.

5. The idea of the allegory of the *egg of Ormusd* has been disclosed, in the progress of western settlements, by the discovery of an earth work situated on the summit of a hill in Adams county, Ohio.[4] This hill is one hundred and fifty feet above the surface of Brush Creek. It represents the coil of a serpent seven hundred feet long; but, it is thought, would reach, if deprived of its curves, one thousand feet. The jaws of the serpent are represented as widely distended, as if in the act of swallowing. In the interstice is an oval, or egg-shaped mound. The oriental notion, thus depicted, is too peculiar to render it probable that it originated here.

6. Thus far, the beliefs of the more northerly of our tribes appear to be of a Chaldee-Persic character.[5] It is no proof that nations have been necessarily connected in their history because they coincide in the rites of sun-worship. Other traits must also coincide. But, to those who object to the idea of the worship of the sun and moon as a natural species of idolatry for barbarous nations to select, between whom, however, no previous connexion or intercourse necessarily existed, it is replied, that this idea did not propagate itself west, with the idolatrous Scythians, at least, beyond Rome, where Sylla established the rite of an eternal Fire; nor did it re-appear among the

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[1] Abstract of the theology of Zoroaster.

[2] History of the Decline and Fall of the Roman Empire.

[3] Iroquois Cosmogony, Part VI.

[4] Smithsonian Contributions to Knowledge.

[5] Notes to Ontwa on Eternal Fire.

Celts, Cimbri, Teutons, Iberians, Sclavonians, and other tribes who filled all Europe, to its extent in Scandinavia and the British isles. Nor do we find that the doctrine of the TWO PRINCIPLES of Good and Evil, so extensively believed by the nations of Central Asia, were spread at all in that direction. The Celtic priests had no such notions, nor do we hear of them among the worshippers of Odin: they both had an entirely different mythology. It is remarkable that there was no sun-worship in the area of Western Europe. The propagation of the doctrines of the Magi appears to have been among the tribes east and south of the original seats of their power and influence. Egypt had them as early as the Exodus; and it has been seen that the idolatrous tribes of Chaldea were addicted to the worship of the sun and moon.[1]

7. It has been found that the Indians of the United States believe in the duality of the soul. This ancient doctrine is plainly announced as existing among the Algonquins, in connection *with*, and as a reason *for*, the custom of the deposit of food with the dead, and of leaving an opening in the grave covering, which is a very general custom.[2] All our tribes make such deposits of viands.

8. They also believe in the general doctrine of the metempsychosis, or transmigration of souls. Pythagoras is supposed to have got his first notions on the subject, from the Egyptian priests, and the recluse Brahmins. But wherever he imbibed the notion, he transmitted it as far as his name had influence.[3] The notions of the northern tribes on this subject are shown incidentally in the oral tales which I first began to collect among the Algonquins and Dacotas in 1822, and which are embodied in Algic Researches.[4] The soul of man is seen, in these curious legends, to be thought immortal and undying, the vital spark passing from one object to another. This object of the new life in general is *not* man, but some species of the animated creation; or even, it may be, for a time, an inanimate object. The circumstances which determine this change, do not appear. Nor can it be affirmed, that the doctrine is parallel, in all respects, to the theory of the Samian philosopher. It would seem that the superior will of the individual, as a spiritually possessed person, himself determined the form of his future life.

9. Great attention is paid by the North American Indians to the flight of birds, whose motions in the upper regions of the atmosphere are considered ominous. Those of the carnivorous species, are deemed indicative of events in war, and they are the symbols employed in their war-songs, and extemporaneous chants. The gathering of these species, to fatten upon dead bodies left upon the field of battle, is the image strongly thrown forward, in their chants, and these warlike Pe-na-si-wug are deemed to be ever prescient of the times and places of conflict, which are denoted by their flight. As the carnivora are familiar with the upper currents of the atmosphere,

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[1] Job. [2] Oneöta. [3] Lemprière.

[4] Part I. Indian Tales and Legends, 1839. Harpers, New York.

where their gods of the air dwell, their association, in the Indian mind, with these deities of battle, as messengers to carry intelligence, is a general belief. But no trace of omens, derived from the examination, after death, of entrails of any kind, as denoting futurity, a custom so prevalent among the ancients, has ever been found, or is believed to exist.

10. Minute observation is also bestowed by them upon the meteorology of the clouds. Their size, their color, their motions, their relative position to the sun and to the horizon, form the subject of a branch of knowledge, which is in the hands of their medas and prophets. Important events are often decided by predictions founded on such observations. The imagery of this exalted view of the celestial atmosphere, with its starry back-ground, and its warfare of thunder, lightning, electricity, aurora borealis, and storms, is very much employed in their personal names. This imagery is capable of being graphically seized on, by their transpositive languages, and is highly poetic. The habit of such observation, has evidently been nurtured by living for ages, as the race has, in the open air, and without houses to obscure every possible variety of atmospheric juxtaposition and display.

11. We might continue this discussion of opinions and beliefs which appear to lie hidden in the mythology of the Indian mind, or are only brought out in an incidental manner, and which appear not to have had an indigenous origin; but we should do great injustice to the Indian character, not to mention by far the most prominent of their beliefs, so far as they govern his daily practices. We allude to the doctrine of *Manitoes*, or what may be denominated Manitology. And here appears to be the strongest ground for originality of conception. All the tribes have some equivalent to this. We use the Algonquin word, because that is best known. The word Manito, when not used with a prefix or accent, does not mean the Deity, or Great Spirit. It is confined to a spiritual, or mysterious power. The doctrine that a man may possess such a power, is well established in the belief of all the tribes. All their priests and prophets assert the possession of it, but the possession is not believed, by even the blindest zealot or impostor, to be supreme, or equal to that of the Great Merciful Spirit, or diurgic deity. A man may fast to obtain this power. The initial fast at the age of puberty, which every Indian undergoes, is for light to be individually advertised and become aware of this personal Manito. When revealed in dreams, his purpose is accomplished, and he adopts that revelation, which is generally some bird or animal, as his personal or guardian Manito. He trusts in it in war and peace; and there is no exigency in life, in or from which he believes it cannot help or extricate him. The misfortune is, for his peace and welfare of mind, that these Manitoes are not of equal and harmonious power. One is constantly supposed to be "stronger," or to have greater spiritual powers than another. Hence, the Indian is never sure that his neighbor is not under the guardianship of a Manito stronger than his own.

This is not half the worst of the doctrine. There are malignant, as well as benevo-

lent Manitoes. Here the TWO PRINCIPLES of Good and Evil, which we have discussed as of oriental origin, develope themselves. The evil Manito is constantly exercising his power to counteract or overreach the good. And thus the Indian, who believes in a passive Great Spirit, or *Gezha Manito*, with no other attributes but goodness and ubiquity, is left in a perpetual and horrible state of fear. His Great Spirit is believed to rule the earth and the sky, and to be the WA-ZHA-WAUD, or maker of the world; but he leaves these two antagonistical classes of Manitoes to war with each other, and to counteract each other's designs, to fill the world with turmoils, and, in fact, to govern the *moral* destinies of mankind.

We thus have the doctrine of Ormusd and Arìman, of the oriental world, reproduced in another form, but one not less fraught with elements to disturb the harmony of creation, to pierce the egg of Ormusd, and to render the life of the simple believer in this dogma an unending scene of discord, dismay, and tumult.

12. There is no attempt by the hunter, priesthood, jugglers, or powwows, which can be gathered from their oral traditions, to impute to the great Merciful Spirit the attribute of *justice*, or to make man accountable to Him, here or hereafter, for aberrations from *virtue*, *good will*, *truth*, or any form of moral right. With benevolence and pity as prime attributes, the Great Transcendental Spirit of the Indian does not take upon himself a righteous administration of the world's affairs, but, on the contrary, leaves it to be filled, and its affairs, *in reality*, governed, by demons and fiends in human form. Here is the Indian theology. Every one will see how subtile it is; how well calculated to lead the uninformed hunter mind captive, and make it ever fearful; and how striking a coincidence its leading dogma of the two opposing principles of Good and Evil affords, with the oriental doctrines to which we have referred.

13. It is difficult to introduce comparisons between the barbarous tribes of America, and the existing civilized races of Asia. The latter, east of the Indus, at least, and bordering on the Indian Ocean, are called non-progressive races; but they possess a type of civilization, founded on agriculture, arts, and letters, which is very ancient. They have practised the science of numbers and astronomy from the earliest times. Most, or all of them, have alphabets. The cuneiform character was in use in the days of Darius Hystaspes.[1] Many of the arts are supposed to have had their origin there. The use of iron among them is without date. Their systems of religious philosophy were committed to writing, if not put in print, before America was discovered. The Chinese knew the art of printing, before it was discovered in Europe. They were acquainted with the powers of the magnet, and the mariner's compass.[2] Naval architecture has belonged to the Chinese and Japanese, time out of mind.[3] The Hindostanees built temples in India of enormous magnitude and exact proportions, long, it is believed, before the use of Egyptian or Grecian architecture. The sword,

[1] Rawlinson. [2] Voltaire's Essay on History. [3] Duhalde's China.

the spear, the bow and arrow, and the shield and banner, came into their hands from the earliest days of the Assyrian, Chaldean, and Persian monarchies.[1]

14. From Professor Wilson's Lectures on the Hindus, the religious system and practices of these nations are based upon a confused notion of God, but have degenerated into the most monstrous and sublime absurdities. Their systems are, one and all, ideal, contemplative, full of mysticism, and extravagantly transcendental. They have not, like the Greeks, so much deified men and made gods of heroes, as they have shown a proneness to deify events, powers, and attributes. The creation, the preservation, and the regeneration, or reproductive powers of man, are worshipped symbolically in different phases, as the FIRST CAUSE. Brahma is creation, Vishnu preservation, and Siva reproduction, among the Hindus.[2] Setting out with an idea of Monotheism, they have in this way multiplied their objects of adoration, till they are the most subtile and extravagant polytheists on the globe. Thirty thousand gods have the Hindus alone. All the elements are deified, and their worship has become proverbial for the gross character of its idolatry.

15. Many have supposed that the oriental arts and knowledge were transferred to this continent at early epochs, and have beheld evidence of this in the ruins of temples, teocalli, and other structures and vestiges of ancient art, scattered over the country. We shall know more of this, when we come to find and decipher inscriptions. As yet, very little is known, scientifically, of American ruins and monuments of antiquity. We have done very little beyond the popular description of certain remains of ancient architecture. The first accounts of Del Rio of the ruins of Palenque, electrified the antiquarian world.

Views and descriptions of the buildings and temples of a former race in Central America and Yucatan, served to confirm this. Generally, very high-toned theories were in vogue, in speaking of the ancient period of American civilization. The descriptions of Stephens, and the artistic views of Catherwood, have done much to render the existence of these ruins in Central America and Yucatan an element of popular knowledge. In our own country, Mr. Norman has added to this diffusion. In Europe, the spread of this knowledge has been in the hands of men of research. Denmark has stepped forward, to separate the era of the Scandinavian, from the other ruins and vestiges of ancient occupancy.[3]

16. In the United States, there has been much speculation upon our mounds and earth works, from the era of Mr. Jefferson's Notes on Virginia, in 1778, to the present day. Generally, the remarks, with much, but various degrees of merit, have wanted elementariness, and not unfrequently seem open to the criticism of high theories upon very slender materials. There has been some attempt, it would seem, by ancient

[1] Rollin's Universal History.

[2] H. H. Wilson's Two Lectures before the University of Oxford, on the Hindus. London, 1841.

[3] Antiquitates Americana.

hands in the south, to imitate the gigantic piles of the Euphrates and the Nile. The type of the teocalli and terraced pyramid cannot be successfully sought, short of these localities. But our ruins are wholly without the oriental inscriptive arts of these early structures of mankind. M. Jomard has, indeed, identified Lybian characters in one of the tumuli of the Ohio valley.[1] The knowledge of the inhabitants of Persia, of India, and of China, is very ancient. We are not authorized to conclude that the ignorant only migrate.

17. Races of men carry with them two generic traits, namely, *arts* and *ideas*. The latter are the most ancient, for a man must have the conception of a thing before he can construct the thing itself. Opinions, therefore, of God, of worship, of astronomy, in fine, the pre-thoughts or principles of every art and science, should be sought as the earliest evidences of the connections and affinities of races. Thought and words are older than works. This truth gives to philology, as a proof of antiquity, its best claim. Races who thought in a particular manner, or whose thoughts succeeded each other in a certain fixed train, spoke grammatically alike. 'I see a horse,' or 'A horse I see,' are phrases that indicate two classes of syntax.

18. The opinion that there is a God, that matter was created by him, and continues to exist by his will, is a basis for the Hindu theology, however corrupted.[2] That this power and harmony of the creation is kept up, is continually opposed to another power, and is in danger of being destroyed by it, appears to have been one of the earliest philosopical and religious errors.[3] Man, as the chief possessor of creation, is subject to this disturbing power. Heat, air, water, earth, light, and darkness, affect him. Hence his offerings to them, under various names, in heathen theology and mythology, and the origin of elemental worship. We have given Zoroaster as the earliest author who is known as sustaining this theory under the symbols of fire and the sun. The Brahmins early taught it, worshipping as a primary dogma, as we have stated, the creation, the continuance, and the propagation of the race as different hypostases of God: they also enthroned the elements as objects of worship.

19. The Hindus regard the eternity of life as the great evil. Its indestructibility by death is the grand object from which they seek to be delivered. There is no rest for the soul: it wanders; it suffers various transmigrations from one object to another; and is the great burthen to be dropped. Pythagoras, as stated and believed by the Greeks, is known to have taken this notion from the Brahmins. It is clear, from the writings of the Sanscrit professor at Oxford, that they anciently taught, and now practise it, as one of the prime elements of their theology. They teach, also, a succession of creations or worlds.

20. We have said that it is difficult to compare the notions of our Indians with

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[1] Un Pierre Grève, &c.

[2] Wilson.

[3] Zoroaster.

[4] Vide Wilson's Lectures.

those of the existing orientals: the one is a barbarous race — mere hunters, without knowledge, arts, or letters; the other civilized, and possessing them. Something may, however, be inferred, from the theory announced, of the *antiquity of thought and ideas.*

21. It has been seen, in the course of our discussion, that the Indians of America worship, with more truth and purity than has been found this side of the Indus, the Tigris and Euphrates, the being of a universal God, or Manito, who is called, in the North, the Great, Good, or Merciful Spirit. To his power they oppose an antagonistical Great, Evil-minded Spirit, who is constantly seeking to destroy and overturn all good and benevolent measures. This evil power, or *Matchi Manito,* is represented or symbolized often by the Serpent; hence gifts and addresses are made to him by their Medas and Jossakeeds. They also offer oblations to him directly, as inhabiting the solid earth. They pour out drinks to him. Thus the ancient oriental notion of a dualistical deity is revealed.

22. It has also been seen that they are worshippers of the elements, of fire, and the sun; and that hymns and offerings are made to the latter. It has been shown that their oral traditions contain abundant evidence of the idea of the metempsychosis, or transmigration of the soul through a wandering series of existences, human and brutal. These are certainly not American, but foreign and *oriental* ideas, and denote an oriental origin.

23. If it be now inquired, Are the North American Indians, then, off-shoots of an oriental Indian stock, among whom these ideas once prevailed? it is asked, What stock? The Hindu religious practices and opinions of modern days, if we seek for comparison there, are very different from those prescribed by the Vidas, the most ancient authority. Changes have been introduced by the Puranas and other sacred books of comparatively modern date, so that there are some of their ancient gods which are utterly unknown to modern worshippers.

24. The idea of *caste* is perfectly unknown to the North American Indian. He does not entertain, but repudiates the very thought of it. To him all races are "born equal." The burning of widows at the funereal pile; the casting of bodies into any stream, like the Ganges, whose waters are believed to be sacred; these are ideas and practices equally unknown. The incineration of the bodies of the dead was not practised on this continent, even in the tropics, and is a rite unknown to the tribes of the United States. It is said to be practised in New Caledonia.[1]

25. The periodical offering of cakes, libations, flesh, or viands at the grave, to ancestors, or the Patras of the human race, which is stated to be a custom of the Hindus, is, however, seen to be an idea incorporated in the practice of the American, or at least the Algonic Indians. These Indians, believing in the duality of the soul, and that the soul sensorial abides for a time with the body in the grave, requiring food for its ghostly existence and journeyings, deposit meats and other aliment, at

[1] Harmon's Travels.

Eng. S. Eastman, U.S.A. R. Hinshelwood

FEEDING THE DEAD

and after the time of interment. This custom is universal, and was one of their earliest observed traits.[1] De Bry mentions a feast to fire, in 1588.

26. Another custom, near akin to it, prevails. They offer pieces of flesh and viands, at meals and feasts, to their *O-git-te-zeem-e-wug*, or ancestors. (See Plate 3.) This duty seems to be obligatory on every Indian in good standing with his tribe, who has been, so to say, piously instructed by the Medas or his parents; and the consequence is, he fears to neglect it. Every feast, in fact, every meal at which there is some particularly savory or extra dish, brings prominently up this duty of a gift to the spirit of forefathers, or of those relatives in old times, or newly deceased, who have preceded them to the grave. The first idea that a grave, or burial-ground, or *ad-je-da-tig*,[2] suggests to him, is the duty he owes as an honest man, expecting good luck in life, to his relatives, or *O-git-te-zeem-e-wug*.

When an Indian falls into the fire, or is partially burned, it is a belief that the spirits of their ancestors have pushed him into the flames, owing to the neglect of these pious offerings. Sometimes it is a wife or child that is believed to be thus pushed. In passing a grave-yard or burial-place where the remains of his ancestors repose, the Indian is strongly reminded of this pious duty; and if he has any thing from which a meat or drink-offering can be made, his feelings make a strong appeal to him to perform it.

An Algonquin, on a certain occasion, was passing at dusk through an extensive Indian burial-ground, where his *O-git-te-zeem-e-wug* lay. Believing that the dual soul abides with the body, his fancy pictured to him two of the "Patras" sitting between the graves. He had a kettle of whiskey in his hands. He felt that he could not part with this precious drink, by pouring out even a small libation. He grasped it the firmer, and hurried on, but cast back a furtive glance. One of the spirits was on his track. He hurried on, but his ghostly pursuer gained on him. He determined at once on his course; and letting the phantom come up close to him, he wheeled round on a sudden, and grasped him. He looked, and, lo! he held in his arms, not his pursuer or ghostly patra, but a tall bunch of rushes. The spirit had vanished, and transformed himself to a plant in an instant. Such are the notions of the Algonquins, and, so far as known, the North American Indians generally.

27. It is a species of idolatry laid to the charge of the Israelites, that while they were in the wilderness, they "ate the sacrifices of the dead." (Psalms cvi. 28.) There is hardly a form of eastern idolatry herein alluded to, into which the Israelites had not, at one time or another, fallen; but the most common, wide-spread, and oft-recurring rite, was that of burning incense on high places to imaginary beings, or devils, under the delusive idea of their being gods; the very trait which is so striking in all our Indian tribes.

28. If Hindostan can be regarded in truth as having contributed to our Indian

[1] Hackluyt's Collection.

[2] Grave-post.

stocks at all, it must have been at a very ancient epoch, before the Vidas were written; for it is asserted that the present customs of the Hindoos are corruptions of an elder system, and are in many things new, or traceable to those books.[1]

29. The probability of a Shemitic origin for at least the northern stocks, revives with the investigation of the principles of their languages. It is sought to place this study on a broader basis, by the accumulation of vocabularies and grammars from all the leading stocks. It is already perceived that the elder philologists employed fragmentary materials; that some of their generalizations were too hasty; and that there are no amalgamations of diverse principles of syntax, but, on the contrary, a remarkable oneness; that they are, in fact, rather *una-synthetic* than *poly-synthetic;* not "agglutinated," but accretive.

30. It was early thought that the manners and customs of the tribes savored much of the Mongolic or Samoidean type. The tribes of the East Indies, who were in the mind's eye of the early discoverers, embrace much of that generic type, both in their physical and moral character. Columbus himself thought so.

On the discovery of the race, as represented by the Caribs of the West Indies, in 1492, Columbus was so struck with the general resemblance of their physiological traits to those of the East Indians or Hindustanese, that he at once called them Indianos. All subsequent observers in that area have concurred generally with him in this respect. The red skin, the hazel and glazed eye, and coal-black hair, have continued to our day to be characteristics, even where the breadth of the cheek-bones, modified by artificial craniological pressure, and the varying stature, and effects of mere latitude and subsistence, fail.

31. Such has also been the observation in North America. Ninety-two years after the discovery, that is, in 1584, when the first ships sent out by Sir Walter Raleigh, under his commission from Queen Elizabeth, reached the Virginia coasts, they landed among a generic family of the red men, differing in language wholly from the Caribs, but whose physical type was nevertheless essentially the same. The stock family found in Virginia has since become very well known to us, under the generic cognomen of Algonquins. Wherever examined, between the original landings at Occoquon and Roanoke, and the south capes of the St. Lawrence, they have revealed the same general physiology. They have reproduced themselves, in every age of our history, without change. The black, straight hair, the black, glassy eye, the coffin-shaped face, produced by prominent cheek-bones, and the peculiar varietetic red colour, and fine, soft, inodorous organization of the epidermis and skin, has been recognised as expressively Indian. Fulness or lankness of muscle, height or shortness of stature, and weakness or vigor of vitality, may be considered as the effects of peculiarities of food and climate. But the traits that preside over and give character to the

[1] Wilson.

muscular mass, show themselves as clearly in the well-fed Osage and Dacotah, and the stately Algonquin, as in the fish and rabbit-fed *Gens de Terre* (Muskigo) on the confines of Canada, or the root-eating Shoshonee of the Rocky Mountains.

32. There must be something permanent in the physical type of the man, which has produced itself, with such amazing constancy, through all our latitudes, torrid, tropical, temperate, and frigid. And the facts go nigh to prove that this type is more prominent and important, as indicative of faithfulness to organic laws of lineament, and minute corpuscular organization, than is generally supposed.[1] At least, the result of three and a half centuries does not, where the blood is unmixed, much favor the idea of a *progressive physical development.*

33. Nor is there much to favor the idea of the organization of a new mental germ. The same indestructibility of type, the same non-progressiveness of the Indian oriental mind, is perceived in the race in every part of this continent. A new course of thought led Copernicus and Galileo to infer that the earth turned daily on its axis before the sun. It led Harvey to conclude that the blood circulates by an organic propulsion from the human heart. It led Jenner to believe that one species of virus may destroy the liability to take disease from a more violent natural effect of another and kindred species. There appears to be little or nothing of this kind of thought in the Indian mind of either continent. It appears to have no intellectual propulsion, no analytic tendencies. It reproduces the same ideas in 1850 as in 1492. But if it has this want of originality, this want of a disposition to re-examine the truth of its former opinions or dogmas, is the assimilation to Asiatic arts and sciences strongly apparent?

34. The ancient Persians had a calendar, consisting of twelve moons of thirty days each, giving them a year of three hundred and sixty days. They had a cycle of one hundred and twenty years, and allowed the fragmentary hours of each year to be heaped up before them, till the close of this cycle, when they added the accumulated days, to square their chronology. They believed, like the Hebrews and other oriental nations, that the sun passed every day around the earth.

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[1] The great improvements in the microscope, which have been made within late years, have had the tendency to show the permanency of the physical type of man, by revealing the minute organization of animal tissue, bones, nails, flesh, hair, pores of the skin, &c.

In a series of experiments devoted to the hair, made with this instrument, by Mr. Peter A. Browne, of Philadelphia, this gentleman has demonstrated three primary species of the hair and hairy tissue, or wool, of the human head, as shown by the researches respecting the Anglo-Saxon, Indian, and Negro races. These experiments, which appear to have been conducted with scientific and philosophical care, denote the structure and organization of each of these species to be peculiar. They are denominated, in the order above stated, cylindrical or round, oval, and eccentrically elliptical, or flat. The Indian hair employed in these experiments was the Choctaw. Inquiries are now on foot by this gentleman, if we err not, in connection with the Philadelphia Academy of Natural Sciences, to pursue these results.

According to Sir Stamford Raffles, Hindostan and Java had a market-day every fifth day. The Chinese had a cycle of sixty years. Doctor Morrison states, that the mode of the latter, in recording their chronology, consisted of two set of hieroglyphics, comprising what they denominate *stems* and *branches*. Their cycle was divided into sub-periods of ten stems, and each stem into twelve branches. The hieroglyphic denoting the stem being always different in the cycle, and that of the branches being the same for each relative day, their astronomers had the means of an exact chronology. They had a week of five days; every fifth day being, like the Hindu system, market-day. Each day had a name, and each name a hieroglyphic, representing that object.

35. Something of this kind was found, in the thought-work of the calendar of the Aztecs of Mexico. They had however a cycle of fifty-two years, founded manifestly in original ignorance of the true length of the year, and a wrong division of the months. They had four days, called respectively, Tochtli, Acatl, Techpatl, and Calli, or, a bird, a reed, a flint, and a house. The fifth day was a market-day. These names they repeated to thirteen. Thirteen days constituted a month, or *trecena*, as the Spaniards called it. A year consisted of twenty months, or two hundred and sixty days. All this was clearly the result of a superstitious astrology and wild mythology, in the hands of the priests and political leaders, who were the exclusive repositories of knowledge, and were leagued to acquire power over the people. It was early seen by them, by observing the planetary motions, that their astronomy was wrong. To correct it, and make it tally with the periods of the sun's recessions, they added one hundred and five days to their year, making it, as we now see, correspond to the lunar year of the East.

Each cycle was divided into four sub-periods of thirteen years, called Tlalpilli. To record time, each day had a dot, or date, before its symbol, indicating its number in the Tlalpilli, and a dot or date behind it, denoting the year of the cycle. By this simple contrivance, although the names of the days were often repeated, it was arithmetically impossible that the number of the Tlalpilli and of the cycle should coincide. The arrangements are denoted on the following table.

TLALPILLI 1.	2.	3.	4. CYCLE 52.
1 Tochtli 1	1 Acatl 14	1 Techpatl 27	1 Calli 40
2 Acatl 2	2 Techpatl 15	2 Calli 28	2 Tochtli.....41
3 Techpatl 3	3 Calli 16	3 Tochtli.....29	3 Acatl 42
4 Calli..... 4	4 Tochtli.....17	4 Acatl 30	4 Techpatl 43
5 Tochtli..... 5	5 Acatl 18	5 Techpatl 31	5 Calli 44
6 Acatl 6	6 Techpatl 19	6 Calli 32	6 Tochtli.....45
7 Techpatl 7	7 Calli 20	7 Tochtli.....33	7 Acatl 46
8 Calli.....8	8 Tochtli.....21	8 Acatl 34	8 Techpatl 47
9 Tochtli..... 9	9 Acatl 22	9 Techpatl 35	9 Calli 48
10 Acatl.....10	10 Techpatl 23	10 Calli 36	10 Tochtli.....49
11 Techpatl 11	11 Calli 24	11 Tochtli 37	11 Acatl 50
12 Calli 12	12 Tochtli.....25	12 Acatl.....38	12 Techpatl 51
13 Tochtli.....13	13 Acatl 26	13 Techpatl 39	13 Calli 52

By this system, which is accurately observed in the map of Boturini, which we have inserted in a condensed form, (Plates 1 and 2,) it was easy to determine the time they employed in their migration down the Pacific coast, and into the interior. But their year was still inexact, which was noticed by observations of the priests; and in 1519, at the time the Spaniards arrived, they had corrected it to within two hours and thirty-nine minutes of the exact solar year. This was their greatest triumph. It appears evident, however, that their system of astronomy is of *indigenous growth*, and that, taking a few ideas of what had affected the memories of their ancestors, in the eastern hemisphere, as the market-day, and the double hieroglyphic system, it had been the accumulated result of patient observation, in the clear skies of Mexico.

III. ANTIQUITIES. A.

III. ANTIQUITIES.

A. General archæology.
B. Antique skill in fortification.
C. Erection of tumuli and altars.
D. Evidences of ancient field cultivation.
E. Antiquities of higher northern latitudes.
F. Ancient state of arts and miscellaneous fabrics.
G. Evidences of ancient mining.
H. Ancient ossuaries.
I. Archæological evidences of the continent having been visited by a people of letters prior to the era of Columbus.

A. GENERAL ARCHÆOLOGY.

A. THERE is little in the history of the hunter state of man, that can be dignified with the name of monuments. Tribes, who rely on the bow and arrow for their means of subsistence; who cultivate the earth by loosening the soil with the scapula of a stag or bison; who are completely erratic in their habits and customs; and who put up, as a shelter from the elements, buildings of the slightest and most perishable materials, cannot be expected to have left very extensive or striking monumental traces of their past history. This will be found to be the case, in a peculiar manner, it is apprehended, with the antiquarian remains of the branch of the human race, who formerly inhabited the area of the United States. The most antique things in it, appear to be the people themselves. They are the greatest wonder that the continent has produced.

These tribes roved through vast forests, in which they can hardly be said to have had a fixed occupancy. They were cut up into many petty independencies, perpetually at war with each other, who did not remain stationary long enough to organize governments capable of commanding labor on public works. To waylay an enemy; to shake his scalp in the air; to follow the tracks of a deer or a bear; to brandish the war-club in the dance;—these were esteemed greater achievements among them, than to erect

a column, or inscribe a shaft. We are only surprised that they should have left anything, in the line of antiquities, but the small and naked fields which they tilled.

Yet, it is found that some combined efforts for defence, and the deep-seated principles of a native religion, however erroneous, have scattered throughout the land evidences of such combinations and idolatrous worship, in a species of tumuli and military ditches and encampments, which attest the possession of considerable power. It is true, that these archæological data appear to have been accurately suited to the apparent condition of the tribes, and not to have transcended it. Where an anomalous ruin, or work of art, occurs, which implies a greater degree of civilization, it is safer to consider it as intrusive, or as belonging to a different era, than to attempt to disturb or unsettle the general theory of the hunter period. Time, and the hand of decay and obscuration, are powerful aids to the mystery of antiquity in all lands; but they are especially to be guarded against, in examining the ruins of a barbarian people. Such a people do some things exquisitely well; they manufacture arms and implements with exact and beautiful adaptation to the arts of war and the chase; but the proficiency wholly fails, when we come to examine buildings, sculptures, and like works. A savage may do his part well, in the building of a mound of earth, which is the joint work of a whole village, and is to serve as its place of worship or sacrifice. He may labor as one of a hundred hands, in excavating a ditch, or erecting a parapet for sustaining rude picket work, to shield a community of women from the attacks of clubs or arrows. But it is in vain to look for the traces of an equal degree of labor in erecting his own dwelling. The hunter state required mounds and temples, but no permanent private residences.

The belief in a theory of a high degree of civilization in the area of fierce hunter tribes, such as extended north of the Rio Grande, reaching to the Great Lakes, in any age of which there is reliable knowledge, is indeed calculated to reflect but little credit on American archæological philosophy. Admitting, what is probable, that there were, in the course of ages, elements of the peculiar civilization of Lybia, Phœnicia, Ireland, Scandinavia, and Ancient Britain, and Spain, from mariners or adventurers, either accidentally or designedly landed on the coasts, there is no probability that the number, at any one period prior to the discovery by Columbus, was considerable; and it is nearly certain, that such adventurers or castaways were nearly, if not quite, without females. In either view, they must have relied upon the native female for any period of continuance; and as she would reproduce resemblances of her own physical type, these elements of disturbance or intrusive knowledge would, in a few generations, entirely disappear, if the intrusive men were not violently despatched, like the first English colony in Virginia, or the crew of the stranded vessel spoken of by Iroquois tradition. We should closely inspect our antiquities for these casual evidences of foreign art; and not too hastily attribute an advanced civilization to wandering tribes of hunters and warriors, who stood in no other relation to them than that of conquerors or murderers.

Even in Mexico, where one of these foreign elements was probably at the bottom of their civilization, as testified by Montezuma to Cortez, there was a predisposition on the part of the Spaniards to overrate the native arts and knowledge. Cortez was, in the outset, but a rebel to legal authority at Cuba, and, afterwards, both he and his followers were prone to magnify the type of civilization of the Aztecs in order to enhance the glory of the conquest. A loud stroke of the Indian drum was the sound of a "gong" in the ears of Bernal Dias; a folded skin with devices in the Indian manner, seen at Zempoala, was a "book." This disposition to over-estimate is everywhere observable in the Spanish narratives of a semi-civilized people, who had really much to commend, and many arts that called for astonishment.

But when the eye, about one century later, (say A. D. 1600,) fell upon the small and erratic bands of foresters who were seated along the North Atlantic, from Florida to the St. Lawrence, there was very little to break the wild and cheerless view of barbarity which their manners and customs presented. They were exclusively hunters and fishermen. The little zea maize that they raised to eke out a precarious existence, was a cultivation exclusively in the hands of the females. A coarse kind of pottery in common use was also a feminine art.[1] Their dwellings of mats and bark and poles were alike due to feminine industry. There was, in reality, no *male* civilization, unless it be found in the art of fabricating weapons and implements; in the mnemonic art of recording events in the pictographic characters of the *Kekewin*, and in the state of their numeration, as shown in their exchanges of wrought sea-shells, which had some of the properties of a coin.

In all that related to energy, courage, and expertness; to war and eloquence; to endurance as captives; and to the leading traits of a wild and unshackled independence, they were immeasurably superior to the Aztecs.

When the Anglo-Saxon race began, late in the seventeenth century, to cross the Alleghanies, and to explore the valley of the Mississippi, the forest was observed to have encroached upon, and buried, a class of ruins in the shape of tumuli, barrows, abandoned fields, and military earth-works. These relics, of the origin of which the tribes knew nothing, have continued to be the theme of philosophical speculation to the present day.

New discoveries are making every year, as fresh areas of that magnificent valley yield to the hand of agriculture, and the record of its antiquities is thus becoming fuller, and more complete.

It is, perhaps, premature to generalize on the present state of our archæological materials, but something may be done to throw the facts into groups in which they can be more perfectly examined and studied; and little more will be attempted in the present paper.

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[1] De Bry, 1590.

B. ANCIENT SKILL IN FORTIFICATION.

THE area which is embraced by works of this kind is very large: west of the Alleghanies it embraces the greater portion of the entire Mississippi valley, extending to Minnesota and the banks of many of its confluent streams. The valley of the Ohio appears to have been a favorite field of ancient occupancy. Its fertile soil; its mild climate; its varied resources; and its picturesque character and beauties, appear to have been as well appreciated and understood by its ancient as its present inhabitants. That its possession was coveted, that it was long cherished, and perhaps often fought for, is indicated by the large number of mounds and field-works, of various character, which have been disclosed by its modern settlement. The Valley of the Scioto appears, in particular, to have sustained a heavy ancient population, who left their altars, tumuli, and places of strong defence to attest a power and strength which, we cannot hesitate to say, made Chillicothe its central capital. Whoever examines the full and accurate descriptions which have been given of its varied earth-works by Dr. E. H. Davis, assisted by Mr. Squier, and published in the first volume of the Smithsonian Contributions to Knowledge, must feel impressed either with the very ancient date of these remains, or with the great populousness of its fertile plains. Other parts of this stream, as at Marietta, Gallipolis, the Great Miami, and numerous minor sites, attest, by their monumental remains, the residence and reign of tribes having considerable power.

The long and fertile area of the American bottom opposite St. Louis appears to have been another central seat of this occupancy; and the relative positions of the Monk mound, and its satellite mounds, furnish, in some respects, a strong coincidence with the astronomical and astrological structures of the Toltecan race.

In Virginia, Kentucky, Tennessee, and along the borders of the lower Mississippi, the number of works of defence, and the strong idolatrous character of the ancient inhabitants, are denoted by other remains, which are seen to have covered large areas of the most valuable and fertile portions of those states. Dr. Troost and Dr. Dickenson have exposed peculiar classes of facts.

These archæological vestiges extend eastwardly, and then north-eastwardly from Mississippi and Louisiana, through Alabama, Florida, and Georgia, quite to South Carolina, where a work of this kind exists on the estate of the late Hon. John C. Calhoun, which is called Fort Hill. The Tuscaroras of North Carolina, in 1712, built a fort to defend themselves against the colonists under Colonel Moore, but it was not found efficient against field-guns, and they were obliged to make an unconditional surrender.

It is not known that the small tribes of the Northern Atlantic fortified against an enemy, at least, that they erected any works of much or permanent importance, corresponding to those in the West.

Works of this character again appear in Western New York, in the ancient territories of the Iroquois, extending as far south as Auburn: they are seen on the highest and eldest ridge of land, extending through Erie and Chautauque counties to the portages of the Alleghany river. It is not apparent that all these works are of the same strong military character, and required as many hands to defend them, as the prime fortifications of the West; but they embrace the same principles, so far as they are carried out, and the sepulchral and general remains indicate the same era.

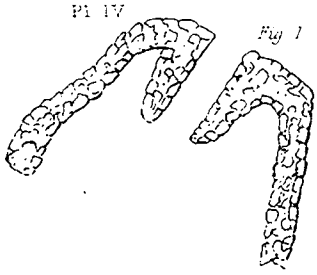
There is one feature, in which the works found in the West all agree. They evince a strong natural capacity for defence. They cover the highest points of land, and are so placed as to command its approaches. The form and size of the work to be adopted, was immaterial whenever a hill-top or plateau was occupied. It was walled or ditched in, according to its geological outlines. The principle of the *bastion* was secured by any heights or lands which commanded a length of wall or picketing. *Traverses*, generally resembling a segment of a circle, were drawn in front of the gates, sally-ports, or openings. Small hay-cock mounds were, in other situations, erected to rake with missiles these entrances. The entrances themselves were sometimes of an oval or zig-zag form. Difficulties of ingress, and facilities of issue, of a hand to hand force, were created by curved, or parallel lines, or by gaps, suitably defended.

Examples of each of these principles of the ancient fortification, as it exists in the Mississippi Valley, are given in the Smithsonian volume No. 1, to which we have alluded. They will be found described in the works at Bournville, (Plate IV. page 11), at Fort Hill, (Plate V. page 14), at Hamilton, Butler County, Ohio, (Plate VI. page 16), where the *Tlascalan gateway is exemplified.* On the Little Miami, (Plate VII. page 18), on the Great Miami, (Plate VIII. 1. 2. 3.) In Licking County, Ohio, (Plate IX. 1. 3. page 24), on Point Creek, (Plate X. page 26.) And by the accurate surveys depicted in Plates XI. to XV., respectively. These plates and descriptions secure the requisite degree of scientific accuracy.

The different modes in which a gateway or sally-port is covered, in these antique works, by traverses and mounds, is denoted by the following Plate, No. 4., Fig. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

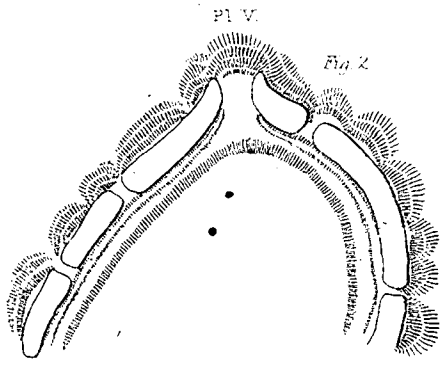
Pl. IV

Fig. 1



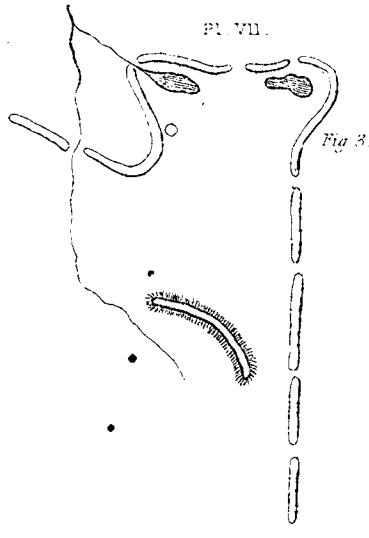
Pl. V.

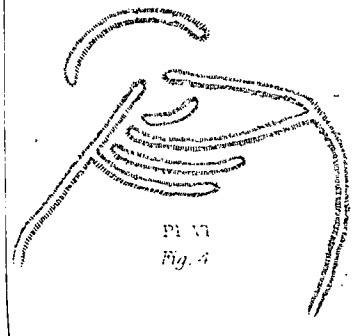
Fig. 2.



Pl. VII.

Fig. 3.





Pl. VI

Fig. 4.

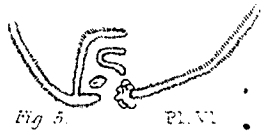


Fig. 5. Pl. VI.

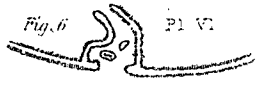
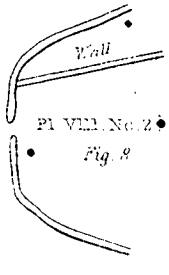


Fig. 6 Pl. VI.

Pl. VIII. No. 1

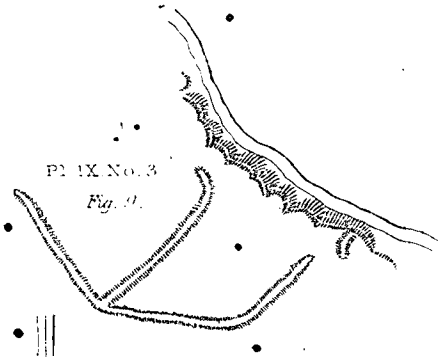
Fig. 7.



Wall

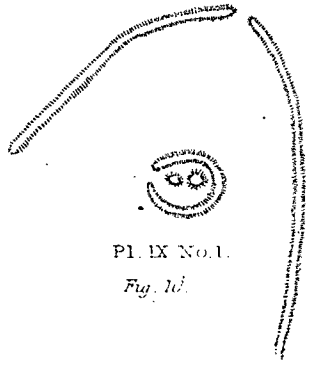
Pl. VIII. No. 2.

Fig. 8



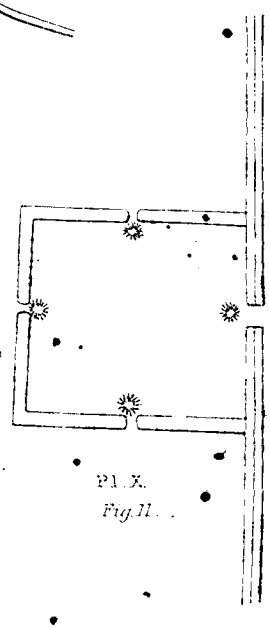
Pl. IX No. 3

Fig. 9.



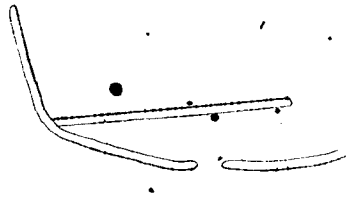
Pl. IX No. 1.

Fig. 10.



Pl. X.

Fig. 11.



Pl. VIII. No. 4

Fig. 12.

Drawn by Capt. S. Eastman, U.S.A.

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GATEWAYS OF ANCIENT MOUNDS.

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C. THE ERECTION OF TUMULI, OR ALTARS OF SACRIFICE.

I. Tumuli Proper.
II. Redoubt Mounds.
III. Barrows.
IV. Minor Altars of Sacrifice.
V. Totemic Mounds.

1. It has been perceived by a part of the preceding observations, that the Indian theology recognises deities of Good and Evil, to one or both of whom they offer sacrifices. These sacrifices, when they are made to propitiate the deity, or avert a calamity, as *sickness in the family*, which is one of the most common and general modes of affliction in which an Indian's heart is melted into sympathy,—these sacrifices, I remark, in such cases often consist of some cherished object in the animate or inanimate creation, hung up at the lodge door, on a high peeled pole, and exposed thus to dangle in the air. Scarlet cloth, which is a favorite color; ribbons, which are bought at a high price; the wings of a bird, or, when the appeal is strong, a small dog, which has first been devoted to the sacrificial knife, are thus offered.

Other, and more general objects of request, calamities to be avoided, or luck to be secured, are expressed by some cherished thing, such as a piece of tobacco, which is deemed a sacred plant, thrown into the water or fire, or left upon a rock. Still another mode of making an acceptable offering, is by the incense of tobacco, burned in the pipe, the fumes of which, as they rise and mingle with the air, where gods and spirits are thought to dwell, is considered one of the most acceptable of sacrifices. When such offerings are made, the weed has been lighted from fire newly obtained from the flint, and not from common fire; and the offering is always made with some genuflections.

These simple acts of adoration are, perhaps, generally made under the supervision of the medas, priests, or other religious functionaries, or by chiefs or leaders, who unite the civil and what we may call the sacerdotal powers. There is certainly, in each of our United States tribes, a class of men called, in some of the languages, Medas, Jossakeeds, Wabenos, and Muskiki w'ininees, or doctors, who affect to have more knowledge of occult and mysterious things than the rest, and are found to put themselves forward as prophets or seers. It is generally on their omens, deductions, or predictions that the decisions and actions, public and private, of the entire nation rest. Thus the political power, in an Indian tribe, is in fact founded on the religious

element; and as the latter is false, we should not wonder that the former proves fallacious, and so often leads their councils astray.

These simple modes of adoration and worship are conformable with the means of all our United States tribes, wherever they may chance to be, in the forest or on the plains. The tribes themselves are not fixed, in their locations, to one spot all the year round; and neither the possessors of the chieftainship, nor the simple priesthood, have power or means, if they were inclined to use them, to induce or compel labor on fixed places of worship. The deepest recesses of the forest — those features in the earth's surface, which are suited to excite the liveliest feelings of awe, as pinnacles and cataracts, are indeed their chosen places of offering and worship. These natural features are, indeed, most emphatically, "temples not made with hands." They will often, indeed, set up a water-worn boulder on the shores of a lake or river, or in the waste of the boundless prairies, and perhaps tip it, if they have paints at hand, with some resemblances to a person. But as they have, with some few exceptions, no visible idols, carved out of wood or stone, and no tangible objects whatever, out of the arcanum of the *medicine sack*, or *Gush-keep-e-tau-gun*, which embody the idea of idolatry, their adorations and offerings of every kind, to which allusion has now been made, have been deemed remarkable in a savage race, and led to many misgivings, in every age of our history, whether they are not the remote descendants of a race of mankind who had once been acquainted with the true God. This is not the place to examine that question. We are speaking of facts as they exist, and the state of mysterious observances of an erratic people, inhabitants of woods and wilds, who still flank our western settlements.

Such does not, however, appear to have been the character, condition, and, at least, the civil type of a part of the people who have, in some former and unknown age of the continent, erected the mounds of the Mississippi Valley. That people, whatever was the type of their barbarity, or departure from it, had become in a great measure *fixed* in their residences. They raised the zea maize, we have every reason to believe, in larger quantities than any of the existing forest tribes. They appear also, if we are not mistaken, to have cultivated a species of bean and vine, as the antique garden-beds, existing in extensive areas in Indiana and southern Michigan, appear to denote. This enabled them to congregate in large towns and villages, such as were evidently seated in the Scioto Valley and at the mouth of the Muskingum; and they could employ themselves on more fixed and formal plans of worship. Their knowledge of architecture in wood and stone was quite rude. They were acquainted with no metal but copper. They formed chisels and axes and ornaments of that metal. They carved sea-shells. They had not reached to the degree of knowledge of the Toltecs and Aztecs, which led a whole village to live in one large stone edifice (vide reports of Fremont, Emory, Abert, and Cook), that frequently had a hundred rooms, which, by building the first story *solid*, and raising the second on a platform, to be

reached by hand-ladders, nocturnally withdrawn, converted literally their houses into castles. But they constructed, in the United States, mounds of earth, now covered with grass, designed for public occasions, especially of defence and worship, which have resisted the action of the elements for ages, and, if not mutilated by the spade and plough, will stand as long as the pyramids of Cholulu and Gizeh.

They appear to have cultivated public fields, situated in the plains or valleys, near some fortified hill, where the whole mass of the population could nightly, or as danger threatened, resort. The very great area of ground, covered by defences in many places, is a strong reason for supposing that the military work itself was a town or village, where the women and children were under permanent protection. In the wide area of these fortified towns, they could erect their dwellings, which were probably of wood, and therefore perishable, and have left no trace. The military force of such a "fenced city" or town, was more effective, as many of the females could be employed in carrying arrows, and other light work. There were no bombs, as nowadays, to fall over an enclosure; the great struggle was always at the gates; which were maintained in a desperate hand to hand struggle with darts and clubs, as we have indicated in Plate 4, on the plan of the antique fortifications.

The larger mounds, which were the places of offerings and sacrifices, and of the singing of hymns, were without the works. These, it is most probable, were only approached by the priests, before or after the conflict; and were the sites of public supplications, and public te deums. It was no desecration of the object to which the large tumuli were dedicated, to employ them as sepulchres for their celebrated men; but rather served to invest them with the character of increased sacredness and respect.

2 & 3. The minor mounds, such as we have denominated haycock mounds, appear to have been seated inside or outside of a defended town or fort, of a military character, and were a sort of redoubt. When seated at places distant from such works, they were generally mere barrows.

4. But there is a third species of the class of minor mounds, which were evidently of an *altaric* character. This appears to have been first shown by Dr. Davis, in his elaborate examination of the antiquities of the Scioto Valley. That offerings were made by fire by the mound-builders, as well as by the existing race of Indians, is clearly shown. An altar of earth, not very imposing in its height or circumference, was made by them from loose earth, in which two simple principles were observed; namely, that of the altar and pyramid. It was circular, that all could approach and stand around it; and second, that it should have concavity enough at top, to prevent the fire from tumbling off. Here the people could freely make their offerings to the officiating jossakeeds, which appear to have consisted most commonly of the pipe in which incense had been offered, and which was probably, from its ordinary and extra-ordinary uses, one of the most cherished objects in the household. It is probable, from

the number of these altars in the Scioto Valley, that it had a dense population in it; and there was, not improbably, a choice in the priest or officiating powwow, the result of personal popularity, as we see in public men at the present day.

By long use, the bed of the loam or earth composing the altar would become hard, and partake, in some measure, of the character of brick. What circumstances determined its disuse, we cannot say. It is certain, that in the end the fire was covered up, with all its more or less burned and cracked contents, and the earth heaped up, so as to bury it most effectually, and constitute a mound. This peculiar formation, as Dr. Davis informed me, was first exposed by the action of the river, which undermined one or more of these structures, exposing the baked red line of earth, of a convex form, which had made the former bed of the altar, and upon which vast numbers of sculptured pipes were found. These pipes have been figured in the first volume of the Smithsonian Transactions, and constitute a body of the best sculptures, although not the only ones of a similar character, for their artistic skill, which have yet come to light. It is found that the purposes of exchange, perhaps, have carried them *north* to the lakes, and east to some parts of the country formerly occupied by the *Eries*, the Iroquois, and the Mississagies.

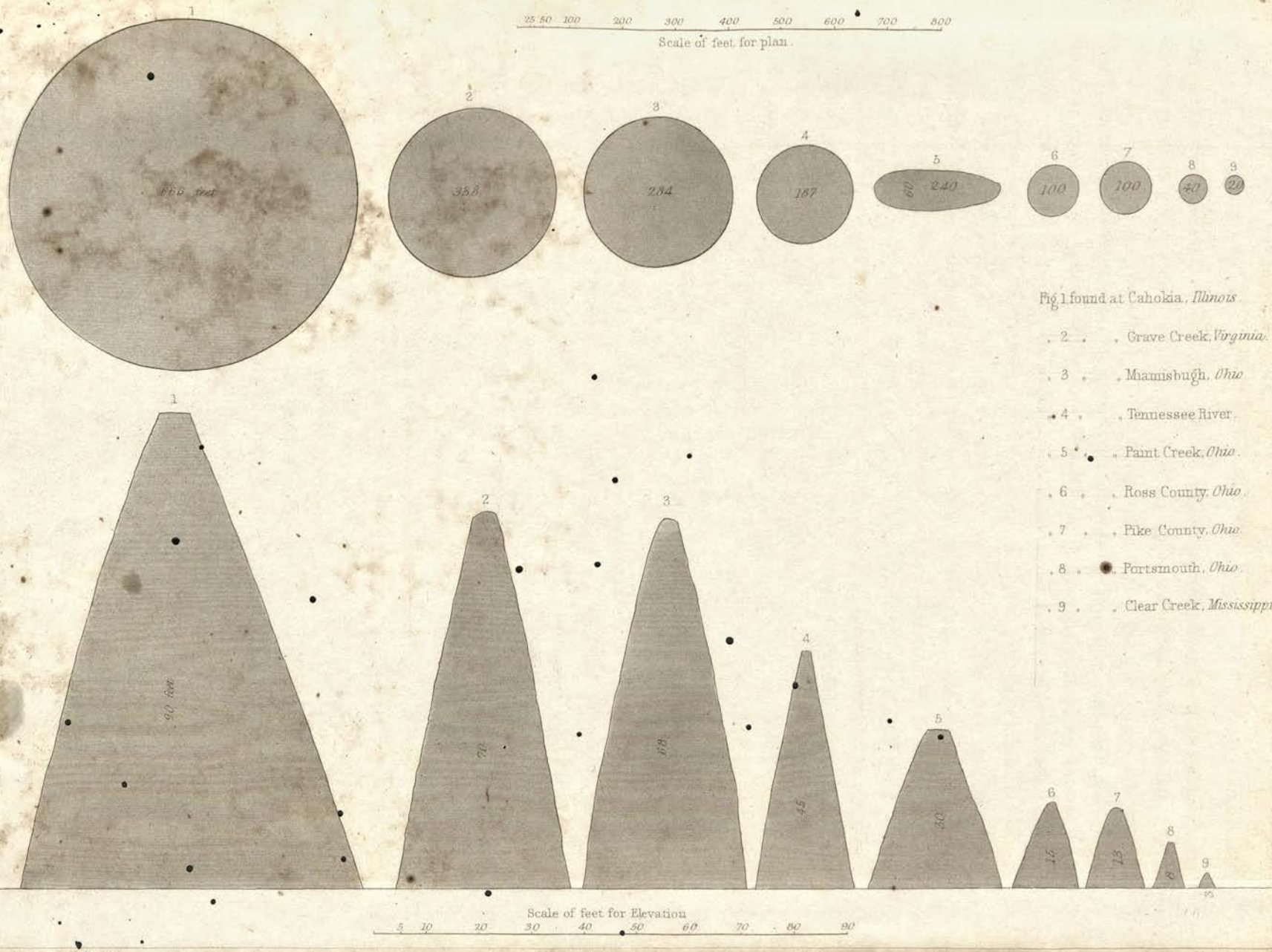
The accompanying Plate (No. 5, Figs. 1, 2, 3, 4, 5, 6, 7, 8, 9) exhibits, in a series, the base and circumference of the principal mounds existing in the West and South, and a diagram of their relative elevation.

5. It remains only to speak of one class of mounds, which differ wholly in their object and mode of construction, as well, probably, as their era of erection, from all the preceding species. Allusion is made to what have been called the *imitative* and Wisconsin mounds. Mr. David Dale Owen has figured several of them with great exactitude, in his report of the survey of the public lands, made to the General Land Office in 1839, but they had before attracted attention, and an account of some portion of them with drawings, was published in Silliman's Journal of Science.

These mounds, or monuments of earth, consist of the figures of animals, raised on the surface of the open country, and covered with grass. None of them exceed ten feet in height, although many of them include considerable areas. Their connection with the existing Totemic system of the Indians who are yet on the field of action, is too strong to escape attention. By the system of names imposed upon the men composing the Algonquin, Iroquois, Cherokee, and other nations, a fox, a bear, a turtle, &c., is fixed on as a badge or stem from which the descendants may trace their parentage. To do this, the figure of the animal is employed as an heraldic sign or surname. This sign, which by no means gives the individual name of the person, is called in the Algonquin, town-mark, or Totem.[1]

A tribe could leave no more permanent trace of an esteemed sachem or honored

[1] The true pronunciation is *do'-daim.*



Drawn by Cap S Eastman U S A

individual, than by the erection of one of these monuments. They are clearly sepulchral, and have no other object, but to preserve the names of distinguished actors in their history. The FOX, the BEAR, the WOLF, and EAGLE, are clearly recognizable in the devices published.

Tradition would drop such a custom in two or three centuries, if the same tribe had not continued to live in the same area. But, in reality, the tribes who occupied Wisconsin, say in the year 1800, had not occupied it from the earliest known ages. The Winnebagoes still occupied the shores of Green Bay, on the arrival of the French. Immediately south of them were seated a nation which is now unknown, under the name of MASCOTINS, or Prairie Indians. The Sacs and Foxes were still in Lower Michigan. The probability of their more recent origin, than the mounds proper, rests on this; but it is admitted that there are no traditions respecting them.

D. EVIDENCES OF A FIXED CULTIVATION AT AN ANTIQUE PERIOD.

I. Prairie-fields.
II. Remains of antique Garden-beds.
III. Influence of the Cultivation of the Zea Maize.
IV. Antiquities of the higher northern latitudes of the United States.

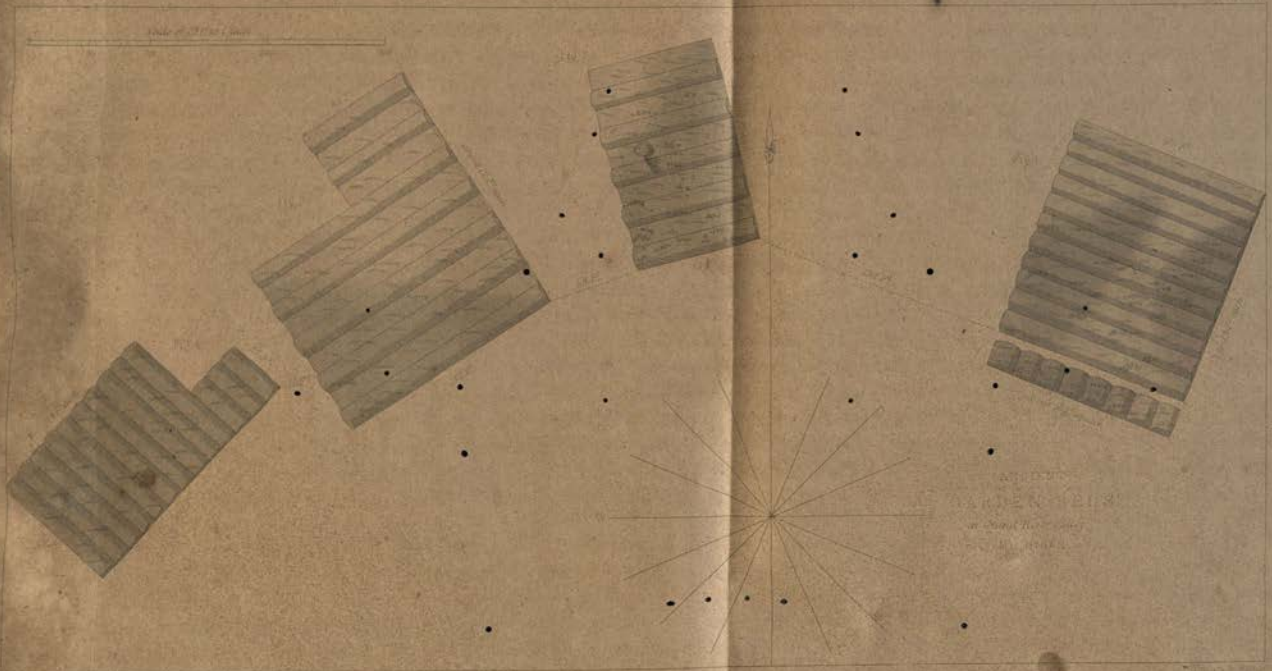
I. Prairie-Fields.

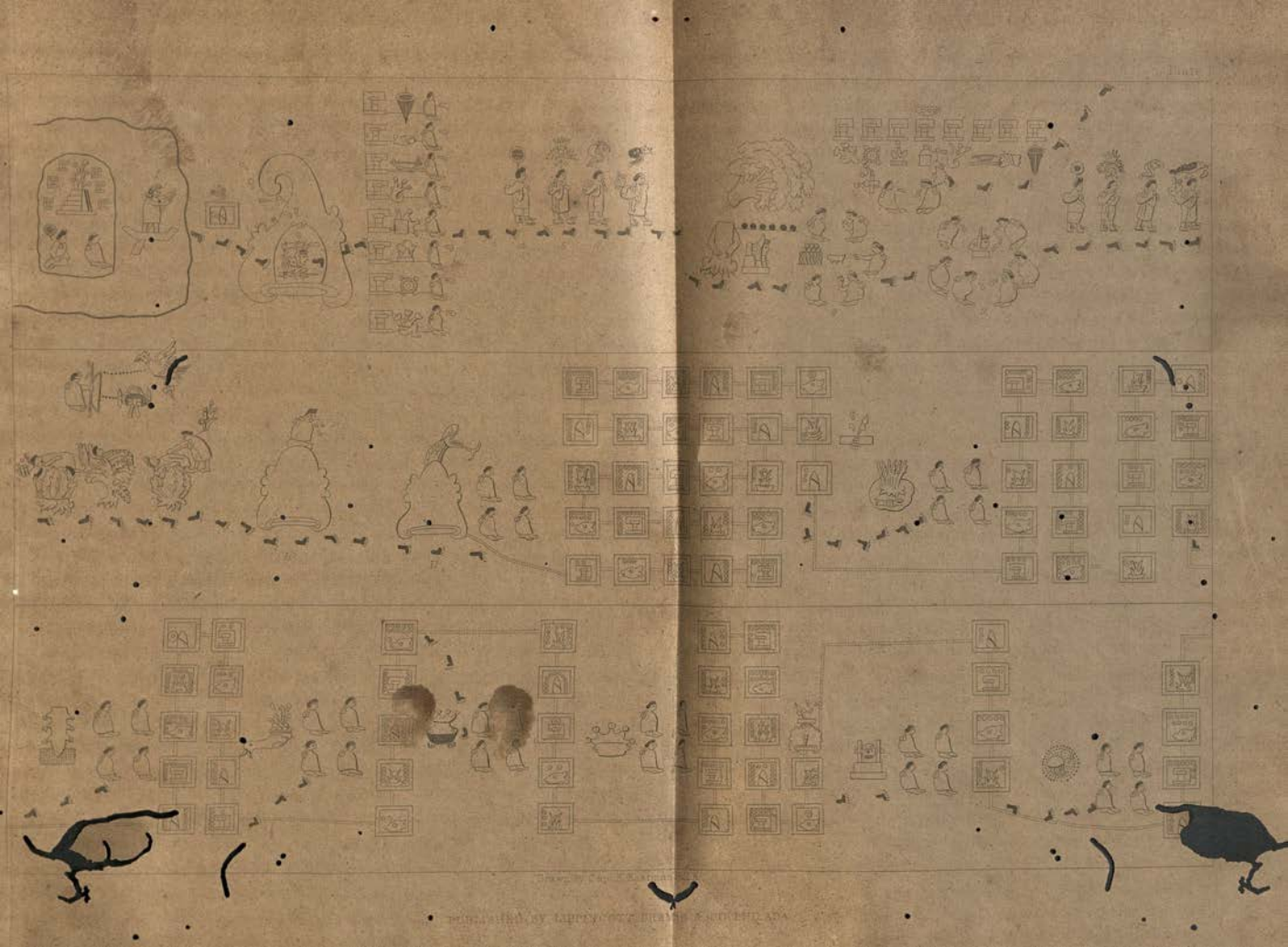
What proportion of the prairies of the West may be assigned as falling under the inference of having been abandoned fields, may constitute a subject of general speculation. It appears to be clear that the great area of the prairies proper is independent of that cause. Fire is the evident cause of the denudation of trees and shrubs in a large part of the area between the Rocky and the Alleghany mountains. Water comes in for a share of the denudation in valleys and moist prairies, which may be supposed to be the result of a more recent emergence from its former influence. But there is a third and limited class of prairies, or openings, in the forest regions which may well be examined with a view to this question. Portions of the western valleys are clearly referable to this class.

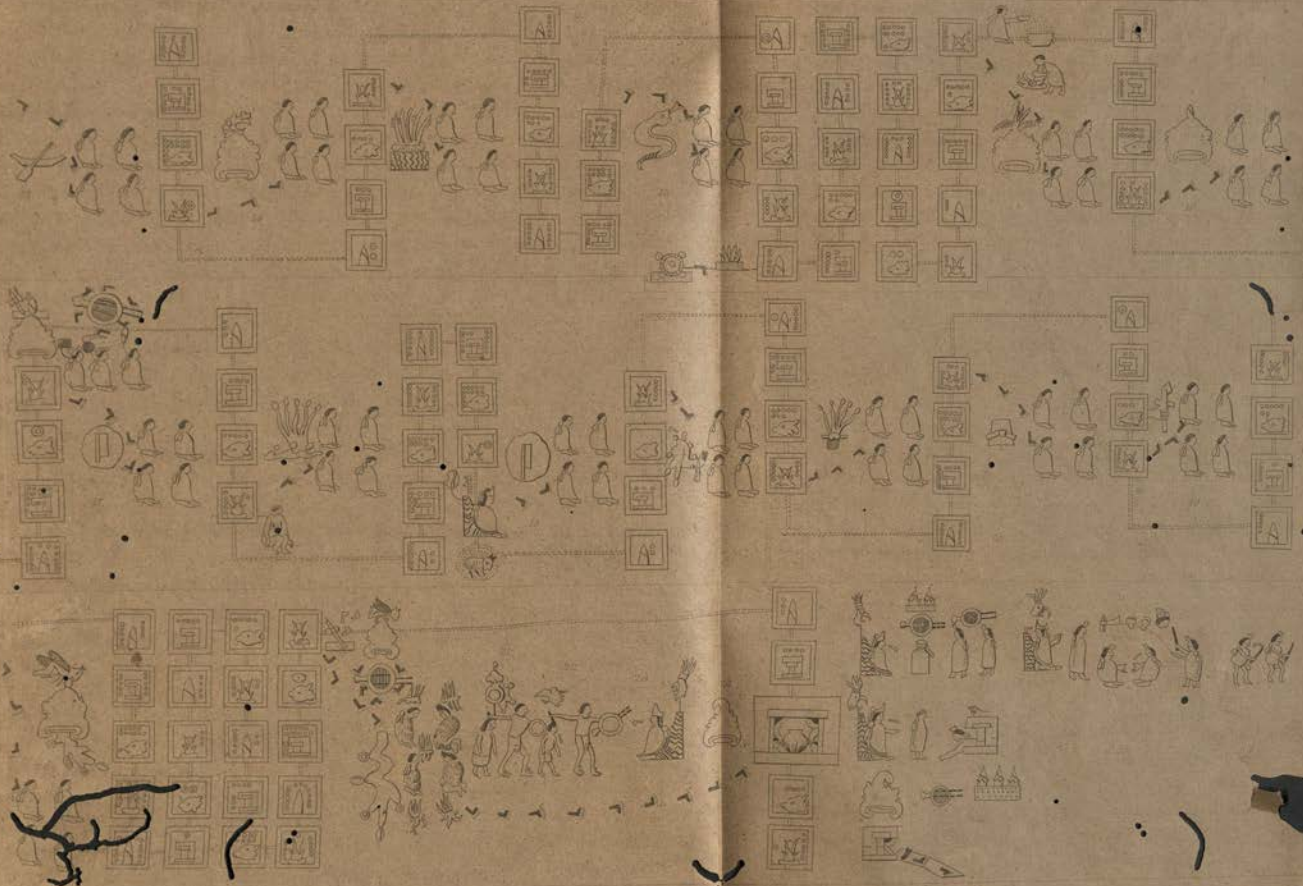
We submit evidences of such former cultivation in a paper on the antique garden beds, as they have been called, in Indiana and Michigan, and some remarks on the origin and extent of the cultivation of the zea maize, as drawn from the Indian traditions.

II. Remains of antique Garden-Beds, and extensive Fields of Horticultural Labour, in the primitive Prairies of the West.

The history of man, in his state of dispersion over the globe, is little more than a succession of advances and declensions, producing altered types of barbarism and civilization. In what particular grade of either of these types the Indian race were, on reaching the shores of this continent, is unknown, or to be judged of, chiefly, by their monuments and remains of ancient art and industry. That they, like most of the great Shemitic stock who peopled Asia, had undergone great transitions, rising and falling in the scale of comparative civilization, as they developed themselves in the vast, and, as to their origin, indefinite area of land and ocean stretching between the banks of the Euphrates and the Mississippi, is apparent. They were found, at the discovery of America, as hunters.







With what actual state of knowledge they had reached this continent, or if as nomades or hunters, to what height of civilization any part of them had attained after reaching it, and before the discovery, are questions which would hardly have been asked with respect to tribes in the northern latitudes, had it not been for the mounds, earth-works, and other monumental vestiges, overgrown with forest, which were found on the settlement of the Mississippi Valley. Every disclosure in our antiquities which tends to shed light on this subject is important; and it is under this view that I submit the accompanying drawings (Plates 6 and 7) of some curious antique garden-beds, or traces of ancient field-husbandry, which appear to denote an ancient period of fixed agriculture in the prairie regions of the West. These vestiges of a state of industry which is far beyond any that is known to have existed among the ancestors of the present Indian tribes, exist chiefly, so far as is known, in the south-western parts of Michigan, and the adjoining districts of Indiana. They extend, so far as observed, over the level and fertile prairie-lands for about one hundred and fifty miles, ranging from the source of the Wabash, and of the west branch of the Miami of the Lakes, to the valleys of the St. Joseph's, the Kalamazoo, and the Grand River of Michigan. The Indians represent them to extend from the latter point, up the peninsula north to the vicinity of Michillimackinac. They are of various sizes, covering, generally, from twenty to one hundred acres. Some of them are reported to embrace even three hundred acres. As a general fact, they exist in the richest soil, as it is found in the prairies and burr oak plains. In the latter case, trees of the largest kind are scattered over them, but, in the greater number of cases, the preservation of their outlines is due to the prairie-grass, which forms a compact sod over them as firm and lasting as if they were impressed in rock; indeed, it is believed by those who have examined the grass which has preserved the western mounds and earth-works, that the compact prairie sod which covers them is more permanent in its qualities than even the firmest sandstones and limestones of the West, the latter of which are known to crumble and waste, with a marked rapidity, under the combined influence of rain, frost, and other atmospheric phenomena of the climate. As evidence of this, it is asserted that the numerous mounds, embankments, and other forms of western antiquities, are as perfect at this day, where they have not been disturbed by the plough or excavations, as they were on the earliest discovery of the country.

The annexed drawings (Plates 6 & 7) exhibit plats and sections of these antique beds, from the Grand River and St. Joseph Valleys, of Michigan. They were taken from undisturbed parts of the mixed forests and prairie lands near those primary streams. Those from Grand River, were taken near Thomas Station, in 1827; those from the St. Josephs, from a point near the village of Three Rivers, in 1837. They certainly offer new and unique traits in our antiquities, denoting a species of cultivation in elder times of an unusual kind, but which has been abandoned for centuries. They are called "garden beds," in common parlance, from the difficulty of assimilating them

to anything else; though it would be more proper, perhaps, to consider them as the vestiges of ancient field labor. The areas are too large to admit the assumption of their being required for the purposes of ordinary horticulture. Plats of land so extensive as some of these were, laid out for mere gardens or pleasure-grounds, would presuppose the existence, at the unknown period of their cultivation, of buildings and satrapies, or chieftaindoms of arbitrary authority over the masses, of which there is no other evidence. The other antiquarian proofs of the region are, indeed, of the simplest and least imposing kind; not embracing large mounds, or the remains of field fortifications — unless we are to consider these horticultural labors of the table-prairie lands as having existed cotemporaneously with, and as appendant settlements of, the principal ancient defenced towns and strong-holds of the Ohio Valley.

The principal points of inquiry are, by whom and at what period were these beds constructed and tilled, and whether by the ancestors of the existing race of Indians, by their predecessors, or by a people possessing a higher degree of fixed civilization? In most of the other antiquarian earth-works, or remains of human labors of the west, we observe no greater degree of art or skill than may be daily attributed to hunter races, who are infringed upon by neighboring tribes, and combine for the purpose of defence against hand-to-hand missiles, such as hill-tops surrounded with earthen walls and palisades. But there is, in these enigmatical plats of variously shaped beds, generally consisting of rows, evidence of an amount of fixed industry applied to agriculture, which is entirely opposed to the theory that the laborers were nomades, or hunters.

So far as my knowledge extends, the area of country marked by these evidences of a horticultural population, cover the tract from the head waters of the Wabash and the Miami of the Lakes, to the eastern shores of Lake Michigan. Similar beds are said to extend elsewhere. The beds are of various sizes. Nearly all the lines of each area or sub-area of beds, are rectangular and parallel. Others admit of half-circles, and variously curved beds with avenues, and are differently grouped and disposed. The mode of formation indicates two species of culture. The first consists of convex rows, whose arches spring from the same bases in opposite directions, — as seen in Figures 1 and 4, Plate 6.

In the other kind, the bases of the convex rows are separated by a path, or plain, as shown in figures 2 and 3, Plate 6.

Both the plain and the convex beds are uniformly of the same width. If the space between the beds is to be viewed as a path, from which to weed or cultivate the convex bed, the idea is opposed by the comparative waste of land denoted by a perfect equality of width in the beds and paths. Besides, there are no such paths in the larger masses of rows, which are wholly convex, but are bounded by avenues or paths at considerable distances. The principal species of culture resembling this arrangement of beds, in modern horticulture, consists of beans, potatoes, and rice; that of celery requires, not a path separating the ridges, but a ditch. Indian corn

may have been cultivated in rows. The former and the present mode, as far as we know, was in hills. These antique corn-hills were usually large. They were, as the Iroquois informed me in 1845, three or four times the diameter of the modern hills;—a size which resulted from the want of a plough. In consequence of this want, the same hill was mellowed by the scapula or substitute for a hoe, or instrument used for planting, during a succession of years. Thus the corn-hill became large and distinct, and in fact a hillock. This is an explanation, given me while viewing the ancient corn-fields, near the Oneida stone,[1] which are now overgrown with forest trees.

These ancient garden-beds of the West may have derived their permanency from the same want of agricultural implements and of horses and cattle to plough the land, and from the practice of reforming and replanting them by hand, in the Indian manner, year after year. In this manner, we may account for one of their most surprising traits, namely, their capacity to have resisted both the action of the elements and the disturbing force of the power of vegetation.[2]

Rev. Isaac M'Coy cut down, in 1827, an oak tree, on one of the beds (figured in Plate 6, Fig. 2), which measured thirty-eight inches in diameter, at the height of twenty-six inches above the ground, and which denoted *three hundred and twenty-five cortical layers.* This would, agreeably to admitted principles in the progress of vegetation, give A. D. 1502, as the date of the first annual circle, or cortical ring deposited by the tree. The continent was discovered ten years before this assumed date. Cabot ran down the north Atlantic coast, it is true, five years later, but did not land. Cartier first entered the Gulf of St. Lawrence in 1534. But he left no man in the country, during that or the next year, when he ascended the river; and the Indians of whom he inquired respecting the sources of the St. Lawrence, told him that these sources were very remote, that the waters expanded into several large lakes, and that no man had been heard of, who had ever gone to their source. Quebec was founded in 1625.[3] Sir Walter Raleigh sent his first colony to Virginia in 1584, although a colony was not permanently settled till 1610. The Holland States began their first exploratory efforts under Hudson, in the present area of New York, in 1609. Historians have fixed on 1608, as the date of the first effort of the French to colonize Canada. The English Pilgrim Fathers, from Holland, followed the track of Hudson, in 1620, intending, it appears, to enter the great river he had discovered, but landed at Plymouth.[4] From none of these sources could an agricultural population, whose labors appear to have terminated in Indiana and Michigan about 1500, have probably proceeded.

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[1] This stone, which I visited in 1845, is a boulder of syenite — one of the erratic block group.

[2] This force is far less in the temperate latitudes than under the equinoxes, where Mr. Stephens represents it as displacing stones in a wall.

[3] This was eleven years *after* the building of Fort Orange, at the present site of Albany, N. Y.

[4] Foreign Historical Documents, State Department, Albany, N. Y.

The Spanish element of early American population is equally inadequate, chronologically, to have furnished an off-shoot of population for labors prior to, or near the assumed date of these industrial monuments. Although Vespucio discovered the coast of Paria in 1497, and the extended shores of Brazil and Paraguay in 1503, he landed not a soul on either coast. It was not till 1512 that De Leon discovered Florida. Orijaba first landed on the gulf coasts of Mexico in 1518. Cortez followed him in 1519. The mouth of the Mississippi was passed, in the coast explorations of the gulf, in 1527, late in the autumn; but it was not till 1539 that De Soto penetrated Florida, and reached an interior point on the Mississippi. All this while, we are to suppose, on the foreign hypothesis of the origin of these beds, that the horticultural and agricultural labors of the natives of Indiana and south-western Michigan, the vestiges of which are herein noticed, were carried on by a population which, according to one authority,[1] equalled that of Indiana at the period of the observation. Let it be borne in mind, at the same time, that the French from Canada did not penetrate the area of the great Lakes till 1632, when Sagard reached Lake Huron; nor go into upper Louisiana till 1673, when Marquette entered the Mississippi, at the mouth of the Wisconsin; that La Salle did not visit Illinois till 1678; that the settlement at Bolixi, on the Gulf, was not made till 1699; that Detroit was not founded till 1701, and New Orleans not till 1717. With these data in the mind, the idea of these antique agricultural labors being attributable to either of these modern elements of western population, will appear as quite untenable. Besides, both the Spanish and French population, when they first appeared at remote interior points west of the Alleghanies, did not come to undertake agricultural labors at those unsustained interior points, far less to plant extensive gardens and pleasure-grounds, like those whose vestiges we see in the valleys of the Grand River, Kalamazoo, and Elkheart. De Leon, Cortez, and De Soto came to seek new elements of commerce and trade, and to find treasures in the untilled portions of the continent, in its gold and silver, furs and dye-woods, medicinal plants, and other spontaneous productions of the American forests. Agriculture became only an incident in these schemes for discovery and conquest; and was merely resorted to, in the end, to sustain life, and not as furnishing articles of export. But what should induce foreigners to undertake labor on the remote interior table-lands of Indiana and Michigan? Furs and the fur-trade were the only leading source of easy commerce there, and this was not introduced till the first quarter of the sixteenth century.

We are compelled to look to an earlier period for the origin of these agricultural vestiges. It is more probable that they are the results of early cultivation, in some of the leading and more advanced indigenous races who possessed those midland regions between the Mississippi and the Lakes. It was a region which formerly abounded in game of various sorts; and while a part of the season was employed in

[1] Vide letter of Mr. M'Coy.

hunting, a heavy population, such as the vestiges denote, provided breadstuffs by the culture of corn, beans, pulse, and various esculent roots, which are known to flourish in these latitudes.

That this people were not advanced beyond the state of semi-agriculturalists appears probable, from the want of any remaining evidences in architecture or temple-worship, such as marked the Mexican and Peruvian races; for, beyond the occurrence of mounds of the minor class, or small tumuli, there are no evidences of their attainment as constructors or builders. The garden-beds, and not the mounds, form, indeed, the most prominent, and by far the most striking and characteristic antiquarian monuments of this district of country. There would seem to have been some connection between these beds and the peculiar class of low imitative mounds, in the form of *animals*, which mark a very considerable area of the opposite side of Lake Michigan.

Lake Michigan is, indeed, remarkable for its protrusion from north to south, for its entire length, into the prairie regions of Indiana and Illinois. It occupies, in truth, a summit; and while its outlet is into Lake Huron north, and thus by the lake chain and the St. Lawrence into the north Atlantic, the Illinois runs south from its immediate head, and finds the ocean in the Gulf of Mexico. The ancient garden-beds, and the animal-shaped mounds, the latter of which may be supposed to have been erected to perpetuate the memory of great hunters, who bore the *names* of the animals imitated, occupy the same latitudes. They constitute some of the best corn latitudes of Michigan and Wisconsin. It is to be borne in mind that the waters of Lake Michigan alone separate these two classes of remains, and that the northern tribes, who are bold and expert canoe-men, find no difficulty in crossing from shore to shore in the calm summer months.

The French found the eastern and southern shores of Lake Michigan in the possession of the Illinese, some of whose descendants still survive in the Peorias and the Kaskaskias, south-west of the Mississippi. These "Illinese" tribes were of the generic stock of the Algonquins, and did not exceed the others in agricultural skill. None of the early writers speak of, or allude to the species of cultivation of which the horticultural beds, under consideration, are the vestiges. The Ottowas, who still inhabit parts of the country, as at Gun Lake, Ottowa Colony, and other places dependent on Grand River, attribute these beds to a people whom they and the united Chippewas call the Mushcodainsug, or Little Prairie Indians. But there is no evidence that this people possessed a higher degree of industry than themselves. The Ottowas did not enter Lake Michigan till after their defeat in the St. Lawrence Valley, along with the other Algonquins, about the middle of the sixteenth century. The trees growing on the beds throughout southern Michigan and Indiana denote clearly that, at that period, the cultivation had been long abandoned. It was evidently of a prior period. It has been seen that it could not have been of European origin, if we confine our view to known or admitted periods of history. It is more reasonable to attribute

the labor to races of Indians of an early period, and of a more advanced grade of industry and manners, who were yet, however, to a certain extent, hunters. Are not these beds cotemporary vestiges of the epoch of the mound-builders, if not interior positions of the people themselves, who have so placed their fortified camps, or hill-seated outposts, as generally to defend their agricultural settlements from the approaches of enemies from the South?

The charm of mystery is so great, that men are apt to be carried away with it, and to seek in the development of unknown or improbable causes for the solution of phenomena which are often to be found in plainer and more obvious considerations. That this charm has thrown its spell, to some extent, around the topic of our western antiquities, cannot be denied.

III. Influence of the Cultivation of the Zea Maize on the Condition, History, and Migrations of the Indian Race.

The influence of the cultivation of the Zea Maize on the semi-civilization and history of the Indian race of this continent, has been very striking. It is impossible to resist this conclusion, in searching into the causes of their dispersion over the continent. We are everywhere met with the fact, that those tribes who cultivated corn, and lived in mild and temperate latitudes, reached a state of society which was denied to the mere hunters. The Indian race, who named the Mississippi Valley at the era of the first planting of the American colonies, were but corn-growers to a limited extent. It was only the labor of females, while the men were completely hunters and periodical nomades. They spent their summers at their corn-fields, and their winters in the wild forests, doing just what their forefathers had done; and the thought of their ancestors having had the skill or industry to raise mounds, or throw up defences on the apex of hills or at sharp defiles, never occurred to them till questioned on the subject by the whites. They were, it is true, cultivators of the zea maize, so far as has been shown, and also of the tobacco-plant, of certain vines, and of a species of bean,—arts which existed *pari passu* with the hunter state, and which they professed to have known from the remotest times. The tribes of the Carolinas and Virginia, extending along the Atlantic quite into New England, raised large quantities of the corn, or zea maize, and they all relied upon it as one of their fixed means of subsistence. The traditions of even the most northerly tribes traced this grain to the South. That it was of tropical, or of south-western origin; that it extended gradually, and by an ethnographical impulse, into the temperate and northern latitudes, is affirmed by early observation, and is a result which the phenomena of climate *à priora* determines. The Indian corn will not mature north of latitude 46° 30′,—it is not a profitable crop north of 44° 30′, and the tribes who have,

from the earliest times, cultivated it, have no traditions that either themselves or their grain had a northern origin. The first tribes, indeed, in passing north from the continental summit of the Mississippi, who look northwardly on the course of their origin, are the non-corn-raising tribes,—the great Athabasca group. These look to the Arctic latitudes, or the north-east coasts of America, by the Unjiga Pass of the Rocky Mountains, as their place of origin; some of them preserve the tradition of their having landed, amid snow and ice, on the bleak and frigid shores of the Arctic Ocean.

The Indian tribes of the United States, who formerly inhabited both sides of the Alleghany Mountains and the whole Mississippi Valley, extending north to the Great Lakes, and reaching south around the northern coasts of the Gulf of Mexico, all, so far as known, preserve traditions which point either south, south-west, or due west, as their starting point in the ethnographic chain. With the zea maize they brought and propagated northwardly the art of pottery. They made cooking pots, porringers, and vessels of coarse clay, tempered with silex. This art extended also quite into the northern parts of New England, and to the banks of Lake Superior, where it ceases. The Indian tribes of the broad, elevated summit of the Rocky Mountains, never raised corn, nor had they the art of pottery. Frémont found no traces of either, till he passed entirely through them, or went into the latitudes of California;—De Smet noticed neither, in his missionary journeys between the sources of the Missouri and the northern branch of the Columbia. The Shoshonees, or Snake tribe, who dwell in the arid valleys, about the area of Fort Hall, in the southern pass, boil their fish and the flesh of the few animals of those longitudes, in pots made of osiers, or small roots and fibres dug from the ground.[1] On the contrary, the history of the track of migration of all the known tribes of the low and swampy latitudes of the Mississippi Valley and of the Atlantic coasts, is distinctly traced by the fragments of pottery which mark the sites of their ancient villages. Nothing is, indeed, more characteristic of these village sites.

With these two elements,—the arts of raising corn and making pottery, in which they all agree,—our American Indians of the corn-yielding latitudes also brought with them the knowledge of the three species of mounds which particularly mark the western longitudes; namely, the tribal mound of augury or oracles, and of high annual oblations, the mound of sepulture, and the village mound of ordinary sacrifice. These were very different in their object and structure, but were sometimes mixed in application, as caprice or necessity might dictate, or the fortunes of war, which gave the conquering tribe the power, might determine. They all arose, and were founded on one fundamental principle and characteristic of the race; namely, their RELIGION, —in which the worship of the sun and moon and various planets stood as types of

[1] Vide N. J. Wyeth, Esq. Doc. Ind. Off. Int. Dept.

divinity, and was, more or less, an element of union; and this system of worship appears to have marked all the primordial or first emigrated tribes. It must be recollected, as one of the fundamental points in our antiquities, that the Indian tribes are of an age which is very antique,—that they have occupied various parts of the continent not only for centuries, but probably for scores of centuries. An observer, otherwise prone to great sobriety of conclusion, thinks they must have reached the continent soon after the dispersion of mankind.[1]

A people who require a pile of earth or stones in the shape of a mound,—a teocalli or House of God, as the Aztec word imports,—though they be otherwise incapable of combined labor, except when religion impels them, may be supposed to have manual skill and means to raise either. The united hand-labor of many, devoted to such an object, would soon accomplish it. There is nothing, indeed, in the magnitude and structure of our western mounds, which a semi-hunter and semi-agricultural population, like that which may be ascribed to the ancestors or Indian predecessors of the existing race, could not have executed; whereas, the interior of these earthy pyramids, even the largest of them, has disclosed nothing beyond a rude state of the arts, or, at best, such arts of pottery and sculpture, shell-work and stone implements, as are acknowledged to belong to the hunter or semi-hunter period. It is these interred evidences of the actual state of the arts, found in the mounds, that denote the mounds themselves to be the work of the semi-hunter races, before they or their descendants had fallen into their lowest state of barbarism, or that type in which they were found by the colonists between 1584 and 1620. There is little to sustain a belief that these ancient works are due to tribes of more fixed and exalted traits of civilization, far less to a people of an expatriated type of civilization, of either an ASIATIC or EUROPEAN origin, as several popular writers have, very vaguely and with little severity of investigation, imagined.

It is impossible to discuss, on general principles, the vestiges of the agricultural labors, and curious "garden-beds," in the forests and prairies of Indiana and Michigan, which have been taken up for examination in this paper, without considering the subject of an antique period of semi-civilization in the West, in all its bearings. Viewed in its true lights, there appears to be a unity of period and general character in the mounds, the elevated and various earth-works, defences, hill-tops, ditches and embankments, remains of cultivated fields, the peculiar and low state of the Mechanic arts, the ignorance of the use of metal, and the want of knowledge of the common principles of antique Military science, which are, more or less, evident and conspicuous at the various sites of western antiquities, but which yet stamp a certain character of unity upon all. This coincidence in knowledge and want of

[1] Vide Mr. Gallatin. Am. Eth. Trans. Vol. I.

knowledge, marking the type of the civilization, is to be traced in the antiquities of the whole area of country from the shores of the Gulf of Mexico, extending eastward to the cape of Florida, and northward, both along the Atlantic shores and up the valley of the Mississippi and its great tributaries, till the mingled evidences of it, from both leading tracks of migration, eventually meet, and are to be found in the wide area of the Lakes.

The Aztecs did not, according to their own records—the pictorial scrolls—reach the Valley of Mexico until A. D. 1090. There are no evidences to be relied on, of inhabitants of earlier date in the Mississippi Valley, who were more elevated in their character than mere roving hunters, and worshippers of geni. Most of the western monuments denote the twelfth century as the period of their abandonment. This is the general period indicated by the growth of the larger forest trees, on mounds and works of art, in the Mississippi and Ohio Valleys, and in Florida. The Aztecs do not trace their history farther back than to their point of landing on the Pacific; *i. e.*, one hundred and eighty-six years. They trace their migration directly from the north, which would have been correct, generally speaking, had they come, in this migratory movement of one hundred and eighty-six years, from the banks of the river Gila, or any part of the peninsula of California, or the gulf-coast of California, as starting points. They do not profess to have come from the *east* or *north-east*, which they must have done, had they reached Mexico from the Mississippi Valley, or the sea-coasts of Florida, Cuba, or the Antilles. It was a movement taking place, with every probability, in longitudes west of the arid spurs and elevations of the Rocky Mountains, and cannot be supposed to have extended over the wide deserts of sand, without game, grass, or water, intervening between those mountains and the sea-coast of Upper California. Such a migration, which was made with great deliberation, building towns and remaining for a series of years at a place, must have disturbed the relations of the Indian tribes, through whose territories they marched, and among whom they roamed, producing lateral migrations, not westwardly, which would bring them to the shores of the Pacific, whence the Aztecs moved, but towards the east. And, when they gained strength enough to overturn the Toltecs and their confederates, still more extensive migratory movements must be supposed to have resulted. Some of these movements tended southward and south-eastward; reaching on one side towards the Pacific, and on the other into Central America and Yucatan, where both the lexicography and the style of building and mode of life denote ancient affiliations. Others would press northwardly and north-eastwardly, where temperate latitudes, and forests abounding with game of every species, would furnish strong means of temptation to men of migratory habits. It is most reasonable to suppose, that the ancient population of the Mississippi Valley, and thence, in process of time, of the Atlantic coast and plains south of the great lakes, was thus derived;—and if so derived, it would bring with it the zea maize, the bean and vine, and summer

fruits—a taste which is most remarkable with all our western Indians—and the knowledge of making cooking vessels, which all the corn-planting tribes possessed. It is certain that the Aztecs, who, in their pictorial scroll, preserved by Boturini, represent themselves as landing from an island, in a boat moved by paddles, did not travel east two thousand miles across the fruitless waste of the Rocky Mountains, to get into the Mississippi Valley, where some writers have located Aztlan, before they set out northwardly for Mexico, from this extraordinary position. Nor would they, in such a movement,—one more arduous, indeed, than that of the Israelites by Sinai,—have found, as they did, tropical fruits.

The fact that the ancient Indian tribes of the Mississippi Valley brought the zea maize with them, is almost demonstrative proof that they proceeded from southern or intertropical latitudes. This grain was the element of Mexican civilization. They could not have lived in large masses or towns without it; consequently, they could not, without such a fixed means of subsistence, have built the pyramids of Cholula and Chalco, and other like works. Erratic tribes, who once knew the value of this grain, would never relinquish it or forget its mode of culture, however far they migrated. Most of our tribes have invented myths, to denote it as the gift of the Deity to them, and as designed for their subsistence when game failed. The cultivation of large fields of corn would have enabled these tribes to band together, and thus to have it in their power to erect the largest mounds in the West. It is remarkable, indeed, that the most numerous as well as the largest mounds are seated on fertile plains or in rich alluvial valleys, which are the best corn lands West of the Alleghanies.

Assuming, then, that tribes from the Mexican latitudes, in its widest ancient extent, —which we may, for convenience, limit to either the Rio Bravo del Norte or even the banks of the Rio Rosco or Red River,—furnished the element of the ancient population of the Mississippi Valley,—that is, the mound-builders and real authors of the period of agricultural industry denoted by antiquarian evidences,—and we have no reason to question their ability or capacity, any more than their strong natural taste, founded on religious habit, to erect the mounds and defences which have been enigmas in those fertile latitudes for so long a period. That their predecessors in this valley were mere foresters, rovers after game, who had no fixed habitation, and dressed simply in the *azian*, we may observe from such naked wandering tribes being found by them in their migration through latitudes *west* of the mountains, where such men are depicted as prisoners, dragged along by the hair of the head, as shown by Baturini's map, to be sacrificed by their sanguinary priests.

A war between two Indian elements, so diverse of habits,—a collision of interests and power between a semi-civilized and barbaric class of tribes,—would be the natural result. Temporary attacks, the conflict of whole tribes, and the dreadful retaliations of a people whose rites and practices in the treatment of prisoners were

horrible, would in time embroil the whole valley, in all its length and breadth, and bring general combinations of race against race. In this manner the feature of military defences, whose remains are now mostly overgrown by the forest, would arise. These defences are all very rude, but peculiar. They appear to have been a native development of the art of strategy. There is nothing of the old world's knowledge apparent here. Hostile tribes fortified the apex of a hill, or threw up rings of earth, or raised plateaus or small mounds in a plain. The ditch was generally *within*, and not *without* the wall. It was, in fact, a shelter for men, or native shelter from missiles. The Tlascalan gateway denotes an affinity of military knowledge with the tribes to whom we refer this particular kind of earth-work. Both the races seem to have contented themselves with making the entrance to a fort difficult, and giving the defenders of it the advantage in the use of missiles and forest arms. The small mounds were placed sometimes inside and sometimes outside of the gateways and openings. From these artificial hillocks a hand-to-hand fight, with arrows, spears, and clubs, could be advantageously maintained. The raised areas were evidently the site of more formidable works, and of 'what might be deemed the temple service of the priests; and these, which appear to be few, embrace the double objects of religion and defence.' Such manifestly were the ancient sites of Marietta, Circleville, and Chillicothe, which may be regarded as the chief points of the ancient power in the Ohio Valley.

That there were such general combinations between native tribes of northern and southern races, is denoted, not only by the extension of the art of mound-building over northern latitudes, but also by the traditions of the Iroquois[1] and the Lenawpes, who distinctly speak of them, and tell us that, after long struggles, the northern confederacy of tribes prevailed, and overcame or drove off the intruding tribes towards the south.[2]

IV. Antiquities of the higher Northern Latitudes of the United States.

Much caution is required in recording the traditions of the aborigines; and the difficulty is increased by the extensive multiplication of tribes and bands, who have had the ambition to figure as original people or principals in their respective groups; the frequency with which they have crossed each other's track in the course of their leading migrations; and the often preposterous claims to tribal originality and supremacy which are set up. There are no records of any sort, beyond their

[1] Vide Notes on the Iroquois; also, Cusic.

[2] American Philosophical Transactions, Vol. I.

rude monuments of earth and stone implements; and even these disappear in proceeding north beyond a certain latitude. Few of the Indians are qualified, by habits of reflection, to state that which is known or has occurred among them in past years; and those who attempt to supply by invention what is wanting in fact, often make a miserable jumble of gross improbabilities. History cannot stoop to preserve this. It must be left as the peculiar province of allegory and mythology. Indeed, their imaginative legends furnish by far the most interesting branch of their oral traditions; and hence this development of the mind of the race will be noticed at large under that head.

In the highest latitudes occupied by the Algonquins, on and north of the Lake Superior basin, we search in vain for any striking objects of antiquity. In the actual basin of Lake Superior, the oldest and most impressive features are those arising from the upheaval of rocks by ancient volcanic forces, or from the extraordinary effects of lake action, operating upon large areas of the sedimentary rocks, which have been broken up by the waves, and re-deposited on the shore in the form of vast sand dunes. But these disturbing forces belong strictly to the consideration of its geological phenomena. The mining ruins are by far the most important, and will be noticed hereafter. (Vide G.)

There are no artificial mounds, embankments, or barrows in this basin, to denote that the country had been anciently inhabited; and when the inquiry is directed to that part of the continent which extends northward from its northern shores, this primitive character of the face of the country becomes still more striking. The scanty character of the forest growth, the diminished area of the soil, and the increased surface of bare and exposed rock, impart to the country an air of arid desolation. Ancient seas, of heavy and long-continued volume, appear to have dragged along, whether by the aid of ice-fields or not, vast boulders and abraded rocks, which are pitched confusedly into gulfs and depressions of the surface; while the more elevated and denuded portions of the rocks bear, in their polished or scratched superficies, indubitable evidence of this ancient action. The Indian, standing upon these heaps of rock-rubbish, and unable to reach the true causes of the disturbance, is prone to account for appearances as the work of some mythological personage. It is something to affirm that the mound-builders, whose works have filled the West with wonder,—quite unnecessary wonder,—had never extended their sway here. The country appears never to have been fought for, in ancient times, by a semi-civilized or even pseudo-barbaric race. There are but few darts or spear-heads. I have not traced remains of the incipient art of pottery, known to the Algonquin and other American stocks, beyond the Straits of Saint Mary, which connect Lakes Huron and Superior; and am inclined to believe that they do not extend, in that longitude, beyond the latitude of 36° 30′. There is a fresh magnificence in the ample area of Lake Superior, which appears to gainsay the

former existence and exercise by man of any laws of mechanical or industrial power, beyond the canoe-frame and the war-club. And its storm-beaten and castellated rocks, however imposing, give no proofs that the dust of human antiquity, in its artificial phases, has ever rested on them.

By far the most striking object in the basin of Lake Superior, which had attracted the attention of the early inhabitants, was, evidently, the native copper, which, in the shape of detritus, exists so extensively in that quarter. This metal, which is found also in situ, as part of the product of veins in the trap rock, has been scattered abroad, by geological action, along with the erratic block and diluvial deposits. It is also found to exist, to an uncommon extent, in its original position along with the ores, spars, and vein stones, in both which locations the Indians, who call it Red Iron,[1] explored it. They employed it in making various ornaments, implements, and instruments. It was used by them for arm and wrist bands, pyramidal tubes, or dress ornaments, chisels and axes, in all cases, however, having been wrought out exclusively by mere hammering, and brought to its required shapes without the use of the crucible, or the art of soldering. Such is the state of the manufactured article, as found in the gigantic Grave Creek Mound, and in the smaller mounds of the Scioto Valley, and wherever it has been scattered, in early days, through the medium of the ancient Indian exchanges. In every view which has been taken of the subject, the area of the basin of Lake Superior must be regarded as the chief or primary point of this intermediate traffic in native copper; and, so far as we know, it appears to have been in the hands of the Algonquin tribes: at least, those tribes were found here at the opening of the sixteenth century, when these portions, generally, of the (then) territories of New France were first visited.

Having found a latitude beyond which the architectural antiquities of the Mississippi Valley do not apparently reach, it is seen that such antiquities begin to meet the steps of the inquirer as soon as he passes south of this general boundary. They increase, both in frequency and importance, as he proceeds to the respective basins of Lakes Huron and Michigan, and over the plains and through the fertile valleys of the lake and prairie, and Western States, till they are found to extend to, and characterize the whole Mississippi Valley. They are also traced through all the states east and west of that valley, bordering on the Gulf of Mexico, and extending a limited distance from the Floridian peninsula, along the shores of the north Atlantic.

In exchange for the native copper of Lake Superior, and for the brown pipe-stone of the Chippewa River of the Upper Mississippi, and the blood-red pipe-stone of the Coteau des Prairies west of the St. Peters, they received certain admired species of the sea-shells of the Floridian coasts and West Indies, as well as some of the more elaborately and well-sculptured pipes of compact carbonate of lime, grauwacke, clay

[1] Miskopewábik.

slate, and serpentines, of which admirable specimens, in large quantities, have recently been found by researches made in the inverted-bowl-shaped, or sacrificial mounds of the Ohio Valley, and in the ossuaries of the Lakes. The makers of these may also be supposed to have spread, northwardly, the various ornamented and artistic burnt-clay pipes of ancient forms and ornaments; and the ovate and circular beads, heart-shaped pendants, and ornamented gorgets, made from the conch, which have received the false name of ivory, or fine bone and horn. The direction of this native exchange of articles appears to have taken a strong current down the line of the Great Lakes, through Lakes Erie and Ontario, along the coasts of the States of Ohio and New York, and into the Canadas. Specimens of the blood-red pipe-stone, wrought as a neck ornament, and of the conch bead pendants and gorgets, and of the antique short clay pipes, occur, in the ancient Indian burial-grounds, as far east as Onondaga and Oswego, in New York, and to the high country which abounds in such extraordinary sepulchral deposits of human bones and Indian ornaments, about Beverly and the sources of the several small streams which pour their waters into Burlington Bay on the north shores of Lake Ontario. At the latter place I also obtained specimens of the pyrola perversa in an entire state. All these are deemed to be relics of the Ante-Cabotian period. It may be necessary, perhaps, hereafter, to except from this character the antique short ornamented clay pipes named. There are, at present, reasons for believing that however peculiar this species of pottery may appear to the mere American antiquary, its prototype existed, and may be found, as a relic, in France, Holland, or Germany. There is, indeed, something of an Etruscan cast of character about it. Copper axes, stone pestles, fleshing chisels, fragments of earthen kettles and vases, and mortars for pounding corn, and for breaking up the feldspathic and other materials used for tempering the clay of their earthen-ware, occur in almost every portion of the Algonquin and Chippewa territories. There have also been found specimens of the ancient bone needles used by the females in making some of their fabrics. Reference is made to the annexed plates, with descriptions for each of the objects of antiquarian art above mentioned, together with their names and uses, and the time and place of their discovery and disinterment.

In looking back to the ancient period of occupancy of the upper Lakes, there are one or two features in the earlier antiquarian period, which have not, so far as my knowledge extends, received the notice they appear to merit. The first consists of sepulchral trenches or ossuaries, in which the bones of entire villages, it would seem, have been carefully deposited, after the bodies had been previously scaffolded or otherwise disposed of, till the fleshy parts were entirely dissipated, and nothing left but the osteological frame. My attention was first arrested by a deposit of this kind, on one of the islands of Lake Huron, which had been broken into and exposed by action of the waves. This sepulchre had its direction from north to south, whereas all our existing Indian tribes are known to bury their dead east and west. The

thigh and leg bones were laid longitudinally. They were very clean and white, as if great care had been originally exercised in separating them from their integuments. The area of the bed may have been about four feet in width and depth, by twenty in length. The trench was not fully explored, but the entire number and quantity of bones of almost every part of the human frame, appeared to be such, that it must have embraced the accumulation of a community for a long time. The oldest Indians, at the neighboring island of Michillimackinac could give no account of it, though frequently interrogated. One of the elder men, who had long exercised the functions of a jossakeed, or Indian seer, suggested that they were probably sepulchres of the *Mushkodainsug*, or "Mascotins," as they have been called by the French;— a tribe who are mentioned as having formerly occupied this quarter, and who had been at war with them. The term means Little Prairie Indians, and not, as some think, Fire-Indians.[1]

Recently, aboriginal remains of a very interesting character, including pictographic inscriptions, have been found in the islands of Lake Erie, which appear to throw light on the history of the Indian tribes who formerly inhabited that lake. These remains will be examined, and described in the next volume of this work.

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[1] The Chippewa word for Prairie has the radix for fire, *Shkoda*, in it. Perhaps prairies were anciently called *fire-plains*, from their periodical burnings.

E. THE STATE OF ART, AND MISCELLANEOUS FABRICS.

1. General Views.
2. Antique Pipe of the period of the landing.
3. Stemless Pipe of Thunder Bay.
4. Indian Axe.
5. Arrow-head.
6. Mace, or war-club.
7. Antique Gorget and Medal.
8. Corn Pestle.
9. Akeek, or Indian Pot.
10. Discoidal Stones.
11. Funereal Food Vases.
12. Coin, or its equivalent in sea-shells.
13. Balista, or Demon's Head.
14. Medaeka, or Amulets.
15. Antique Javelin, or Spear.
16. Aishkun, or Bone Awl.
17. Bone Shuttle.
18. Ice Cutter.
19. Rope-maker's Reed.
20. Antique Mortar.
21. Stone Block Prints.
22. Fleshing Instrument.
23. Antique Knife.
24. Ancient Stone Bill, or Tomahawk.
25. Copper Arm and Wrist-bands.
26. Anomalous Objects of Art and Custom.

1. If we were to judge the Chinese by the tools and implements which they employ, as these were exhibited for the first time to the British public in 1842, at the Chinese Museum at Knightsbridge, London, or as since shown by other collections in this country, without the fabrics produced by them, we should certainly underrate their skill and type of civilization and refinement beyond measure. This fact denotes how cautious we should be in judging of the arts of a people who are, by any possibility of just theory, descended from that mixed race,[1] or, what is more plausible, from the purer Mongolic family of northern Asia. It is astonishing, certainly, how exquisitely formed a pipe, spear-head, javelin, war-club, fish-hook, awl, or other implement

[1] The Chinese Nations and Languages. Knickerbocker, Vol. V., No. 5, 1835.

of the present race of Indians, will be made by them, with no other tool but a rude knife, and other aids in the work, which no instructed mechanic would ever use. Among the articles attesting a mechanical or artistic power, of the antique or mound period, are well-wrought needles of bone, shuttles, discs of porphyry, axes, knives of chert, block-prints for clothing, rope-makers' reeds, suction tubes of steatite, and various other implements denoting much aptitude in many arts. Descriptions of these several objects are given, in the sequel, with carefully drawn plates of each instrument.

It is from a consideration of these antiquities, which have been disclosed by tumuli and the plough, that the true state of arts and fabrics of the mound and fort builders must be inferred. We are appealed to by these monuments of history, not to *overrate* nor *underrate* that state, whatever was its type, which we are not disposed to place high in the scale of civilization. But it appears, nevertheless, to have embraced a *transition period* between the pure hunter and the agricultural state, and to have felt the incipient impulses of an abundant and reliable means of subsistence, some fixed power of government, and the expansive influences of interior commerce, so far as the exchange of articles in kind went.

This incipient state of a commercial element, and the first steps of a kind of centralism in government, acknowledged by this ancient people, is shown by the remains of antique mining ruins, such as those on Lake Superior; where the supplies of native copper were got; also in the area of Indiana, where there appears to have been some attempts at metallurgy, perhaps post-Columbian; and the antique traces of the same species of labor existing in the valley of the Unica, or White River, and of the Arkansas river, and, perhaps, the recent discoveries of antique gold mining in California. Accounts of these are appended. These attempts, which evince industry and skill beyond the wants of the mere hunter era, are probably of one epoch; and admit of being grouped together. The whole of the western and northern antiquities of the highest class, embracing every monument of the kind, north of the contemplated territory of Utah, and the country north of the Gila, to which the Toltec and Aztec civilization probably reached, may be viewed together by the antiquarian, as forming the SECOND type of American antique civilization. That this type was of a transferred Americo-Shemitic character, appears probable from renewed inquiries on the languages. That it was distinct from the Toltecan system, which ran to empire and idolatry, is also probable. It clearly included the various and conflicting tribes, whose strife for independency and wild liberty and loose leagues, without the true principle of confederacy, drove it to an opposite system, and led to final disunion, tumult, and downfall.

This ancient group of tribes, who have left their remains in the Mississippi Valley, and appear to have culminated and fallen there, before fresh hordes of adventurous hunters and warriors, had no coin; no science beyond the first elements of geometry,

numbers, and *natural* astronomy; and, necessarily, (from this want of coin,) no fiscal system. Yet there were, evidently, contributions in kind, to enable them to work together on the public defences and tumuli which remain. So much seems clear.

There was another element besides their tendency to monarchy, which separated the Toltecan from the Utah, or northern type of tribes. It was the strong bias to idolatry which led them to found their monarchy on it; while the northern tribes preferred the simpler worship of their gods of air, without temples or an edifice of a local character, except elevated places for offering incense and supplications. When these could not be secured by the selection of geological eminences, they raised artificial heaps of earth. The west has hundreds of such geological or drift mounds. This was the history of the tumuli. The idolatry of image worship was not tolerated by the masses generally, but entered into the limits of their southern borders, as we perceive by small images of stone or pottery, found in Mississippi, Tennessee, and Western Virginia. They were wild worshippers of the elements. They loved to imagine a god who could ride on "the wings of the wind;" who could revel in the clouds, or walk the blue arch of heaven. In every historical sense, they "sacrificed and burnt incense on high places."[1] The minor and more remote tribes, who had fled across the Alleghanies probably at an earlier date, in the attractive pursuit of the deer and bear, and in quest of that wild freedom which they loved; do not, when their habits and traditions and character are closely scrutinized, appear to have been of a radically different stock from the mound-builders; for these Algonquin tribes worshipped the same gods of the winds and mountains. Even in Massachusetts, where there is not an artificial mound, and nothing which can be dignified with the name of an antique fosse, they had, agreeably to John Elliot, the apostolic missionary of 1631, their "*Qunuhqui aye nongash*,"[2] or high places, where the sagamores and powwows lit their fires, and offered incense.

2. Antique Pipe of the Period of the Landing.

The American Indian takes a great pride in his pipe. There is nothing too precious for him to make it from. His best efforts in ancient sculpture were devoted to it. And there is nothing in his manners and customs more emphatically characteristic, than his habits of smoking.

Smoking the leaves of the nicotiana was an ancient custom with the Indian tribes. Tobacco, which is improperly supposed to be an Asiatic plant, appears first to have been brought to England from the North American coasts by the ships of Sir Walter Raleigh, about 1588. Powhatan and his sylvan court smoked it. It was considered

[1] II. Kings, xv. 4.

[2] Indian Bible.

a sacred gift. They affect, in their oral tales, to have received it like the zea maize, by an angelic messenger from the Great Spirit. They offered the fumes of it to him, by burning it in their pipes. This ceremony always preceded solemn occasions. They then partook of the same oblation; and it is well known that they spend a large part of their leisure hours in the pastime of smoking.

It is a custom which marks them in a peculiar manner. While it appears to be ancient, there is nothing more fixed in their habits. I have met them in far distant locations, in the wilderness, in a state of want for food, and yet the first request has been for tobacco. So fixed and general a habit would appear to connect itself with their geographical origin. Yet here we are quite at fault.

There is no mention of the custom of smoking in the Sacred Volume. Abraham and Jacob when they were called upon by the duties of hospitality, offered food, but not a pipe or a smoking mixture, to their guests. Job does not mention it. When God says, "it is a smoke in my nose," it is the fumes of a meat-sacrifice that is alluded to. There is, in fact, no allusion to this custom in the Old or New Testament. Herodotus does not name the pipe or smoking. This looks as if it were an occidental custom. We are obliged, in fact, to come down to the close of the fifteenth century, A. D., the discovery of America, for our first knowledge of the Nicotiana, and its uses.

The ancient tribes made their *op-wa-gun*, or pipe, from various stones or mineral substances elaborately carved, or from a species of terra cotta. Their graves and tumuli afford specimens of both. The Aztecs employed green serpentine. It is apparent, by the progress of antiquarian discovery, that the instrument, as well as the weed, were offered in sacrifice. Some of the western streams have encroached on a species of low mound, disclosing near its interior base a cup-shaped or semi-circular line of hardened earth, which, on investigation, has been found to be a buried hearth or altar, containing innumerable specimens of ancient stone pipes, which appear to have been much altered by fire. Most of these specimens are elaborately carved, representing birds or animals of the country, known to ancient tribes. That these implements had been offered by fire, is conclusively proved by many of them being cracked and burned. The altar is also clearly identified by the deeply hardened strata of loam or earth. Dr. Davis, of Chillicothe, has investigated these altar-mounds on the banks of the Scioto river. Ample descriptions of them are given in the first volume of the Smithsonian Contributions to Knowledge.

The Scioto Valley appears to have anciently borne a comparatively dense population. It is an entire misapprehension to suppose that this was evidence of a highly civilized population. The very custom of smoking, and offering the tobacco plant and the pipe at these altars, a custom so peculiar in itself, is the best proof that the people were of the non-industrial Indian race. What other nation would think of offering on such a rude altar such gifts? We have seen that the oriental world had

no such custom. The style of the pipes is indeed elaborate, and bespeaks a proficiency in the art, which is equal to that of the Toltecs or Aztecs. But it is the pipe-sculpture. No article denoting a higher civilization was found. There are evidences that this art of pipe-sculpture was not confined to the Scioto or Ohio valleys. Mississippi and Tennessee, Alabama and Florida, exhibit detached specimens of equally good sculpture in the same article. It has even been found as far north as N. lat. 46, on the St. Mary Straits. (See Fig. 2, Plate 9.) This sculpture, which is a limestone, represents a lizard. No altar-mounds have been disclosed in these latter States. But these scattered evidences of art, if followed up with skill and assiduity, would probably disclose similar altars in those states. Birds, and not quadrupeds, were generally sculptured.

Of the second species of pipes, namely, the Terra Cotta, there are reasons for supposing it generally of a posterior age.

3. Short Antique Stemless Pipe disclosed by the upturning of an ancient Tree at Thunder Bay, Michigan.

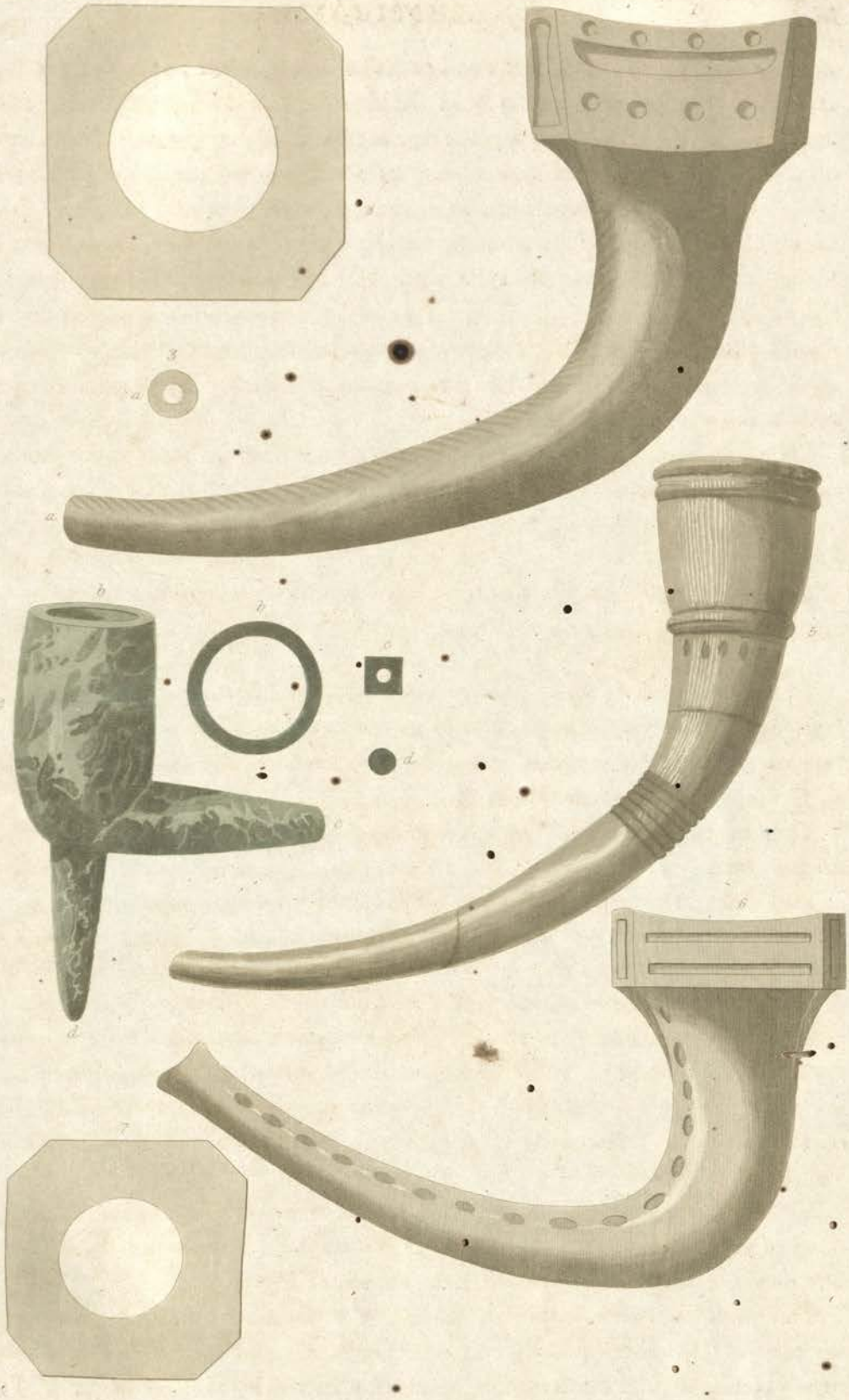
In the month of June, 1839, an Indian chief of River *Au Sables*, named Muk-ud-aie Kain-eiw, or the Black Eagle, presented for my inspection and acceptance an antique pipe of peculiar construction, which he informed me he had found on the main land at Thunder Bay, near the river.

The following drawing (Plate 8, Figures 1, 2, and 3) exhibits an exact figure of this ancient relic.

The chief informed me that he had obtained it about six or seven feet below the surface of the soil, where it had been disclosed by the blowing down of a large pine, which had brought up by its roots a heavy mass of earth. The tree was two fathoms round at the butt, and would make, he said, a large canoe. With it was found the bones of a human skeleton, and two vases or small *akeeks*, but so much decayed that they broke in taking them up. In them, besides the pipe, were some of the bones of the pickerel's spine — a kind of sharp dorsal process. He saw the thigh-bones of the skeleton, but the upper part of it appeared to have fallen to decay, and was not visible.

He thinks the tree must have grown up on an old grave, and that the soil must have accumulated on it; an opinion which appears almost inevitable, for there is no other way of accounting so well for the unusual depth.

The pipe, he avers, although so unlike those now employed, was used by their ancestors. It was smoked by clapping the small end to the mouth, without the use of a wooden stem. Pipes of this kind were in use by the old Indians. Thus far the chief.



Drawn by S. Eastman U.S.A.

ANTIQUE PIPES.

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It consists of a species of comparatively fine-grained, yellowish pottery, resembling the terra cotta, but more slightly baked, and less perfectly tempered.

Subsequent observations, in 1844 and 1845, have disclosed the same species of antique pipe, of various patterns, in the remarkable ossuaries at Beverly, in Canada West; and in ancient graves in Onondaga, Genesee, and Erie counties, in Western New York. The specimens found at the former locality are represented in Plate 8, Figures 5 and 6, and in Plate 10, Figures 1 and 2. Those found in Western New York are depicted in Plate 9, Figures 1 and 3, and in Plate 11, Figure 5. There was also found, among the archæological relics which are so striking in the area of Onondaga, a beautiful specimen, carved from green serpentine, the locality of which mineral is unknown to mineralogists. (See Figure 4, Plate 9.) The specimen, Figure 4, Plate 8, was found in the collection of Mr. Tomlinson, at the Grave Creek Mound, in 1844. It is elaborately carved from a dark-colored steatite. Numbers 2 and 3, Plate 12, are from the same neighborhood. They evince much skill in the style of carving. Number 3 represents a fish common to the Ohio waters.

Among the fragmentary articles which may be referred to the pipe sculpture and pipe porcelain, are the snake's head, Figure 6, Plate 9, and snake's body, Figure 5, Plate 9.

The most noted specimen of the prevalent taste for smoking, as well as skill in the manufacture of the pipe, is represented by Figures 1, 2, and 3, Plate 13. This specimen is in the form of an idol, and was smoked from the back, by the adjustment of a stem to the lower orifice depicted in the back. It appears to have anciently stood on some rocks near the old Indian trail leading from the present site of Brownsville, (the Old Redstone,) to the Ohio river, which is struck about twenty miles below Wheeling. This specimen is eleven inches in length, by four and a half broad, and is formed of coarse, neutral-colored sandstone.

4. Indian Axe.

Various stone implements of the antique period of the hunter occupancy of America, have received the name of "Indian Axe." With what justice this term was applied, in relation to the use made of the European axe of iron, it is proposed to inquire. The ancient Indians, prior to the era of the discovery of America, had indeed no use for an axe, in the sense in which we apply the term now-a-days. Fire was the great agent they employed in felling trees and reducing their trunks to proper lengths. There was no cutting of trees. No stone axe, which we have ever examined, possesses the hardness or sharpness essential to cut the solid fibres of an oak, a pine, an elm, or any species of American tree whatever.

When the wants of an Indian hunter had determined him to fell a tree, in order to make a log canoe, or construct pickets for a palisade, he erected a fire around it, close

upon the ground. When the fire had burned in so as to produce a coal that might impede its further progress, a stone instrument of a peculiar construction, with a handle to keep the person from the heat, was employed to pick away the coal, and keep the surface fresh. This is the instrument called by them *Agakwut*, and to which popular opinion has usually applied the name of axe. The annexed, (Plate 14, Fig. 1,) is an exact representation of one of these antique axes, from the region of the upper lakes. De Bry pictures this process in making canoes.

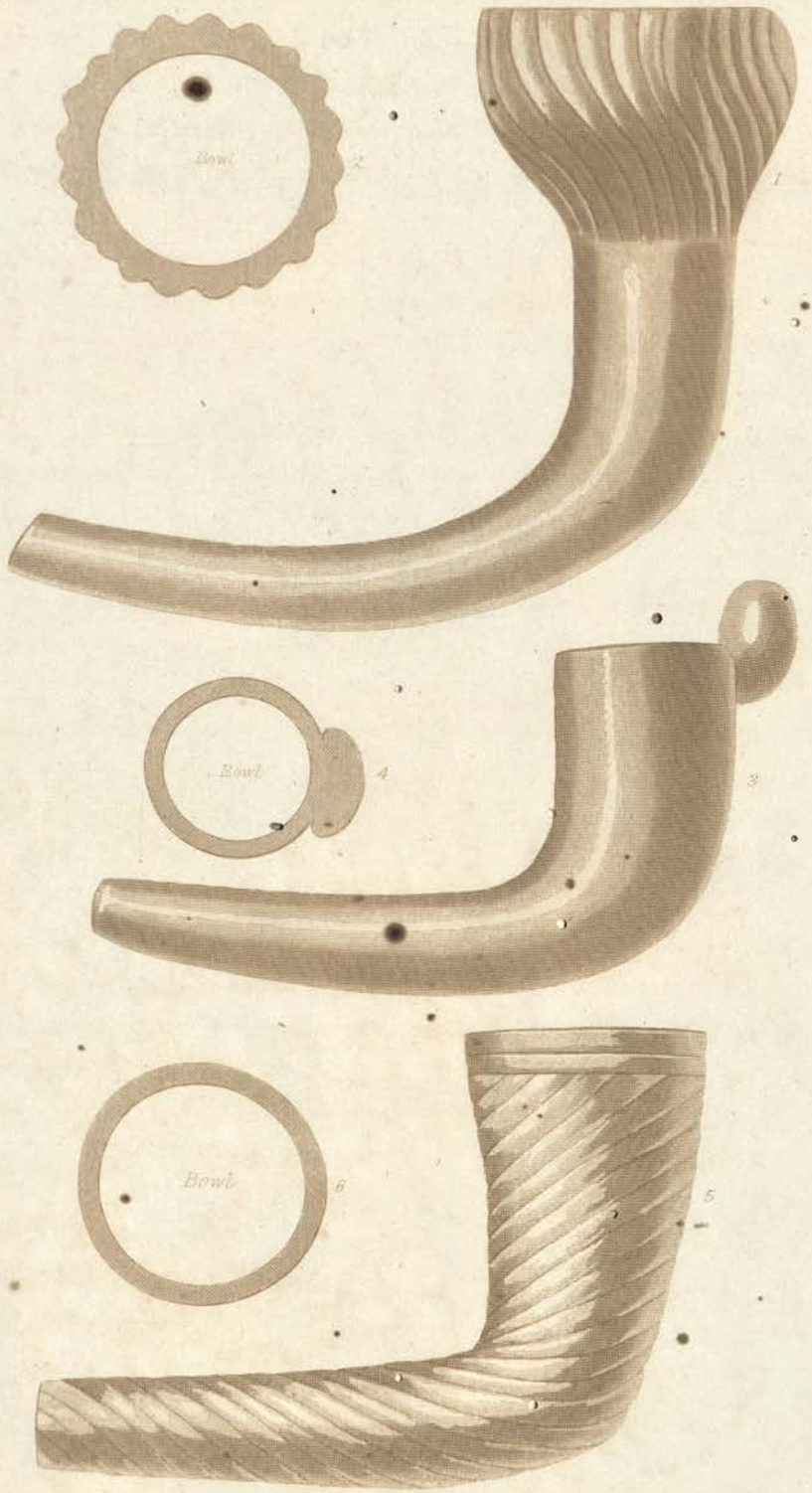
The mode of using this ancient axe, which would be more appropriately classed as a pick, was by twisting around it, of a size corresponding to the ring, a supple withe, forming the handle, which could be firmly tied together, and which would enable the user to strike a firm *inward* blow. (See Plate 15, Fig. 1.) This handle was not at right angles with the axe. It was so placed, as the ring shows, so that at about the length of three feet, it would intersect a line drawn at right angles from the foot of the blade, or edge of greatest sharpness. This incidence of handle to the blade, would enable an indrawing blow to be struck, which there were practical reasons for.

The length of the instrument figured is seven inches, wanting a fraction; its breadth below the ring three and a quarter—at the ring, two and three quarter inches, at the point of the blade two inches nearly. The whole weight is three pounds. The ring is not continued around the inner, or handle side, for the plain reason that no ring at that part is necessary. If made, it would weaken the instrument and give no additional support to the handle. The material of this specimen is a compact grauwacké;—a material of little hardness, and which could be readily rubbed and shaped.

To this account of the earliest stone axe, it may be objected that there are smaller specimens, so small indeed that they could not have been required for an adult. We possess a specimen three and two-third inches in length, and another only two and a quarter inches in length. It is replied that these small axes were adapted to the strength of boys and children, whose labors in the process of fire-fretting were always welcome and important, and their aid was probably given, particularly when we reflect that this labor was generally done by the females.

Canoes of wood are known to have been excavated and shaped by the same process of fire, even after the discovery and settlement of the country. De Bry gives the process as practised by the Indians of Virginia in 1688.

The small species of the coal axe, employed by youths and boys, are numerous. Figures 1, 2, 3, and 4, Plate 16, are from specimens preserved in the National Institute, Washington. Figure 5, same Plate, same locality, is believed to be a hand specimen of the same kind of implement. Figures 1 and 4, Plate 14, are from the West. Figure 2, of the same Plate, is believed to be a hand specimen, formed chisel-shaped. Figure 3 is a drawing reversed, from an antique in the National Institute which appears to have had an eye for a helve, and presented a blade well formed for striking an indrawing stroke.



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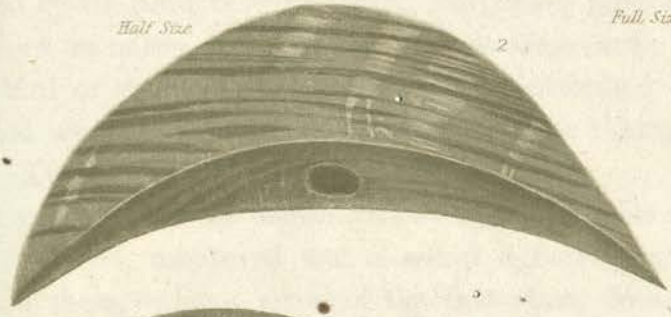

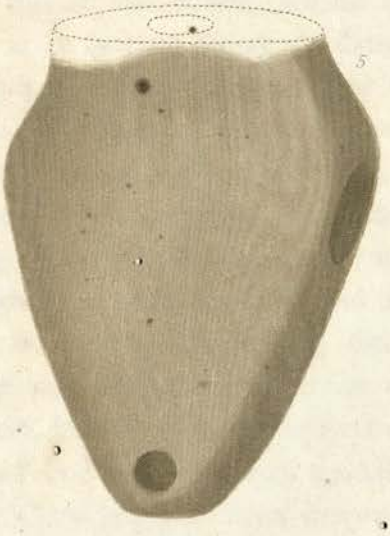

Drawn by Capt. Eastman, U.S.A.

ANCIENT MACE PIPE AND FLESHING INSTRUMENTS

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5. Arrow-Head.

A GREAT variety of these ancient instruments was fabricated, according to the species of hunting, the size and ferocity of the animals pursued, and the ages of the persons using them. Boys were always furnished with small arrow-points, such as were expected to be spent against squirrels, or the lesser quadrupeds and birds. This was the second lesson in learning the art of hunting; the first consisted in using the blunt arrow or *Beekwuk*,[1] which was fired at a mark. Great complacency and pride was evinced by the parents in preparing the rising generation for this art, on expertness in which so much of his future success depended; and a boy's first success in killing a bird or quadruped, was uniformly celebrated by a festival, in which the object killed was eaten, with great gravity, by the elders, and the feat extravagantly extolled. Thus early was emulation excited.

Of the various kinds of arrows picked up in the fields and woods, we introduce the figures of several, numbered and classified agreeably to their sizes and uses. The smallest of these, or boy's arrow of the first class, does not exceed, but often falls below, one inch, besides the shaft, in length: from this they vary to three and a quarter inches. In breadth and the form of the barb there was also much variety, and an entire and ingenious adaptedness of the instrument to the object. Figures 1 to 9, Plate 17, and 1 to 12, Plate 18, exhibit this variety. Of Plate 18, Figures 4 and 5, and 8 to 12 respectively, are drawings of specimens deposited in the collection of the National Institute, at Washington. The use of the arrow, among the early nations of mankind, is so ancient that history is at fault in fixing its date. There is reason to believe that it was coincident with the origin of war, and with the killing of animals. The instrument, in connection with the bow, is first mentioned in the Bible, in Genesis. The paintings found in the ruins of Nineveh, and the earliest dates of mankind, prove its antiquity in war and hunting; and, although the invention of gunpowder has led to far more efficacious and powerful means of destruction in war and sieges, it admits of no question, that the bow and arrow are still the most speedy and efficacious instruments for the repetition of the onslaught on droves of animals. It is the testimony of hunters, white and red, in our day, that arrows can be discharged much faster, and more fatally, from the quiver and bow, upon herds of animals, than it is possible to load and fire balls from a single gun or rifle.' An arrow from the bow of a Pawnee or Cheyenne has been known to pass through the body of a buffalo. Its force upon the human frame is prodigious; as an instance of which I mention, that in some old bones, at Saganaw, an unextracted

[1] Algonquin.

arrow-head was found firmly imbedded in the tibia of a man, nor could any force detach it.

The material of American arrows is generally a conchoidal chert, hornstone, or common quartz. In color it varies from light yellow, to neutral, smoky, or dark brown. The quartz, where that occurs, is usually of the fatty variety, and perfectly white. Pure flint has seldom, if ever, been found.

6. Mace, or War-Club.

There is no instance, it is believed, among the North American Indians, in which the war-club employed by them is made of a straight piece, or has not a recurved head. Generally, this implement consists of a shaft of heavy wood, such as the rock-maple, with a ball carved at one side of the head, much in the manner of the South Sea Islander, or Polynesian war-clubs.

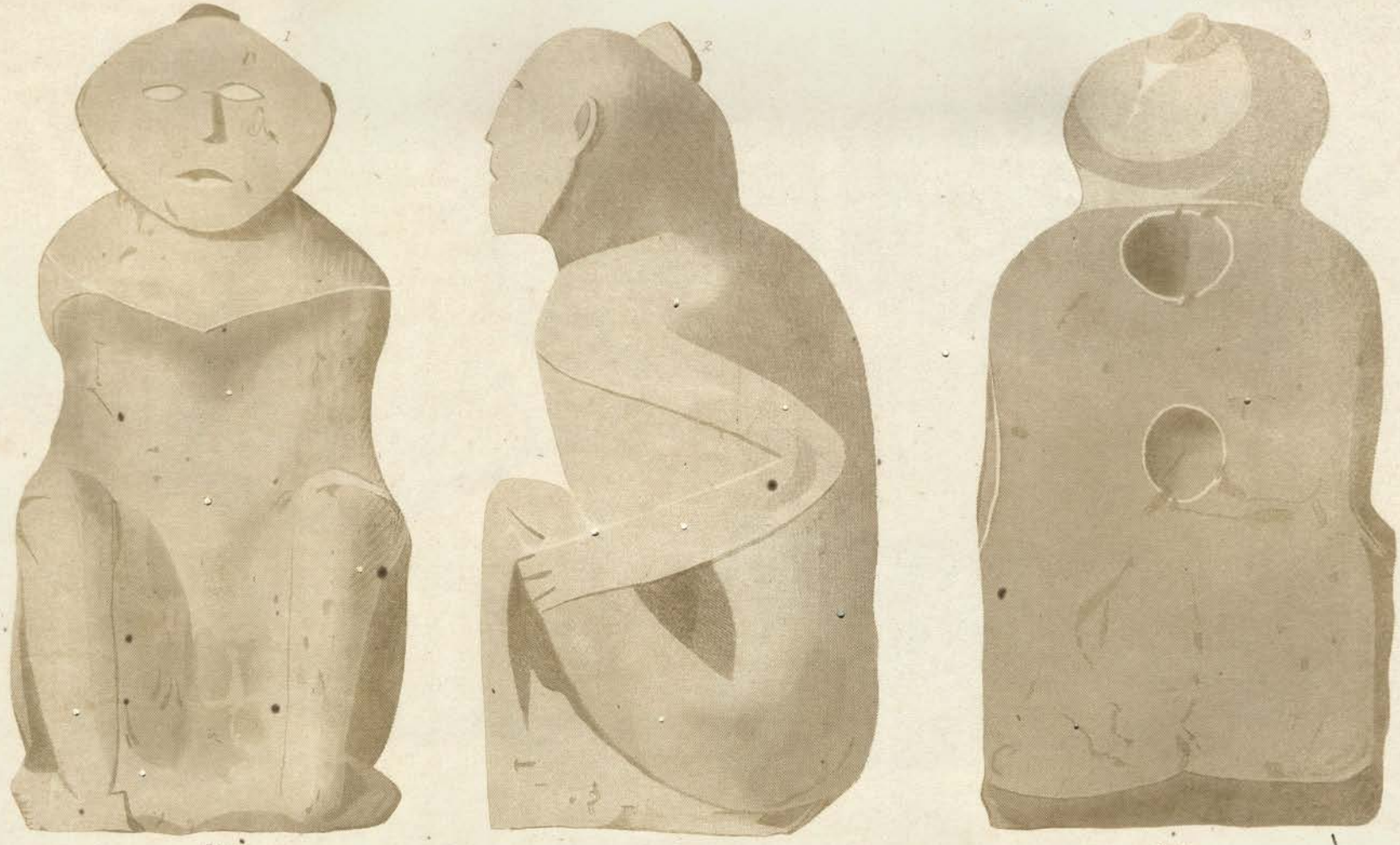
Such is the Pug-ga-ma-gun of the Algonquins. It differs from the Polynesian club, chiefly in its possessing a tabular shaft, and in its less elaborate style of carving. Clubs exhibited at the war-dance or other ceremonial exhibitions, are always *larger* than those intended for practical use, and partake decidedly of a symbolical character.

A practice has prevailed since the introduction of iron, of combining a lance with the same implement. It is then shaped somewhat in the form of the butt-end of a gun or rifle, but having more angular lines. A lance of iron, of formidable dimensions, is inserted at the intersection of the most prominent angle. This fearful weapon, which appears to be the most prominent symbol of war, is very common among the prairie tribes. No warrior is properly equipped without one. It is often elaborately ornamented with war eagles' feathers, and with paints and devices. Brass tacks are sometimes used in the lance-clubs as ornaments, and not unfrequently a small hand looking-glass is sunk or inserted in the tabular part of the handle. It was then intended to be stuck in the ground, and to serve the warrior to make his war toilet. Figures of these several species will be inserted under the head of "Manners and Customs." Of the antique mace, such as was in use prior to the discovery of the country, descriptions, accompanied by plates, have been given under the head of "Stone-bill," or Pointed Mace; see Plate 11, Fig. 1.

7. Antique Gorget, or Medal.

Whether this was in ancient times merely an ornament which any one might wear, or a badge of authority, it might be fruitless now to inquire. It is probable that the modern practice of conferring metallic medals on chiefs only, and of marking thereby their authority, was founded on an ancient practice of this kind existing in the original tribes.

Height 11 inches
4¼ inches on each side



Front

Side

Back

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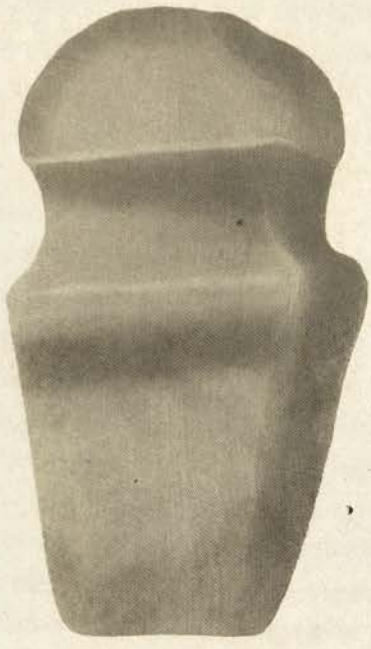
ANTIQUE PIPE.

1



2

3

4

Blade of a Stone Hatchet peculiar from having an eye for the Helve

Capt. E. Eastman, U.S.A.

Illinois & Sons

INDIAN AXE HATCHET AND CHISEL.

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The ancient gorget or medal of the North American tribes, was formed of the inner and shining parts of large sea-shells. The instance figured in Plate 19, Figs. 3 and 4, was taken from one of the old ossuaries of Beverly, Canada West.[1]

This article is three inches across, and three and three quarter inches from top to bottom.

Another species of ancient medal or gorget of smaller size, found in their ancient places of sepulture, consisted of a circular piece of flat shell, from one and a half to two inches in diameter, quartered with double lines, having the devices of dots between them. This kind was doubly perforated in the plain of the circle. Three examples of this form of medal or badge of chieftainship are figured in Plate 25, Figs. 7, 29, and 30. The specimen figure 29 was obtained from an old grave at Upper Sandusky, Ohio; and number 30, Plate 25, from a similar position in Onondaga county, N. Y. These localities serve to show its use among diverse tribes, and prove an extensive community of the prevalent manners and customs;—a point which it is important at all times to keep in view.

In connection with this subject, there is given in Plate 12, Fig. 1, the representation of an ancient British medal, obtained from the descendants of the chief to whom it was given about sixty years after its date: (1764). It will be observed that this medal, which is rudely stamped, was struck the year of the crowning of George III. It presents the boy king's head, crowned with the olive-leaf; and the inscription—Georgius III., D. G. M. Bri. Fra. et Hib. Rex. F. D.—shows that the ancient title of the British kings was then retained in full.

The obverse exhibits a British officer and an Indian, sitting under a tree on rolls of tobacco, shaking hands, with the motto, "Happy while united." The Indian has a pipe resting in his left hand. The officer has his left hand at his breast. The landscape in the background is manifestly the city and harbor of New York; as the stamp "N. York," "D. C. F.," "1764," plainly denotes.

A wing crossed with a pipe, forms an appropriate figure at the top for hanging it by a ribbon.

Figures 3 and 4, Plate 20, are medals of the French period of colonization in western New York, about 1666, in the area of Onondaga county; and are irrefragable proofs of that ill-fated scheme. Fig. 2 shows small medals of an octagonal form, inscribed with the names of St. Agatha and St. Lucia, of the Romish calendar. Both are made from an alloy resembling silver. Number 4 is an ovate medal of the same period, from a leaden plate, and rudely representing, on one side, the figure of a man hanging by his arms, and a snake before it. The other side represents a man sitting. Fig. 3, Plate 20, is a crucifix of silver, of the same period. No. 5, Plate 20, represents an ancient form of gorget, figured with the heads of snakes or tortoises.

[1] This specimen is preserved in the cabinet of curiosities of Miss Crooks, of Dundas; to whose politeness I owe the favor of being permitted to copy this, and some other antiquities.

8. Corn Pestle, or Hand Bray-Stone.

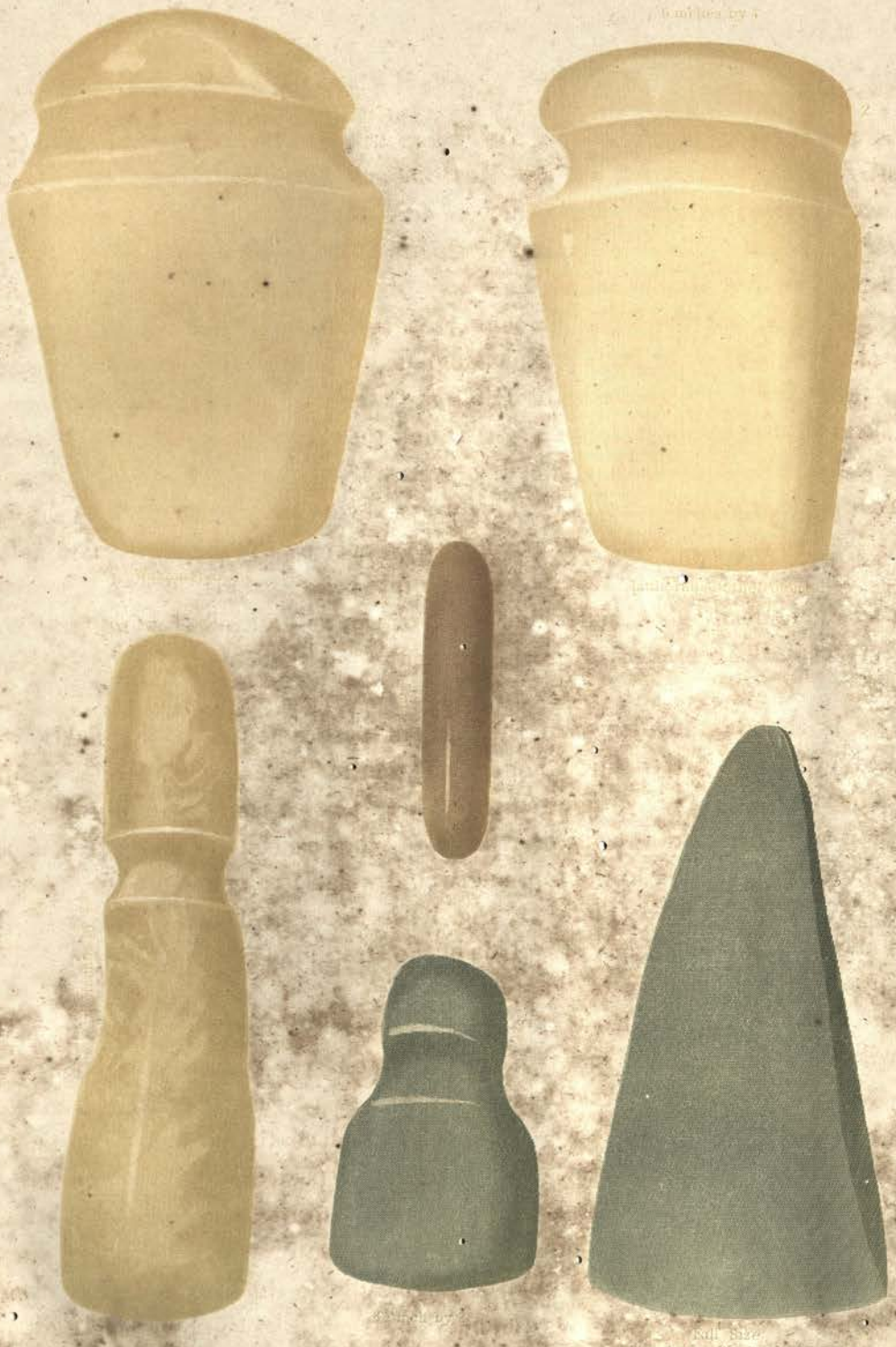
The zea maize was cultivated by the Indian tribes of America throughout its whole extent. Cotton was raised by the Mexican and Peruvian tribes; but there is no instance on record in which the plant was cultivated by tribes living north of the Rio Grande del Norte. The Florida and Louisiana tribes raised a kind of melon, and perhaps some minor vegetables; but the whole of the tribes situated in the Mississippi Valley, in Ohio, and the Lakes, reaching on both sides of the Alleghanies, quite to Massachusetts, and other parts of New England, cultivated Indian corn. It was their staple product. The Delaware, the Hudson, Connecticut, and minor rivers north of it, yielded this grain; and it was a gift which their sagamores and priests attributed to the god of the South-west. The dry grain was prepared for boiling by crushing it in a rude wooden or stone mortar. This was a severe labor, which fell to the women's share; but it was mitigated by preparing, daily, only as much as was required by the family. It was not crushed fine, but broken into coarse grains, in which state it was eaten by the eastern tribes, under the name of samp — a kind of hominy. The dish called "succutash" consisted of green corn, cut from the cob, and mixed with green beans.

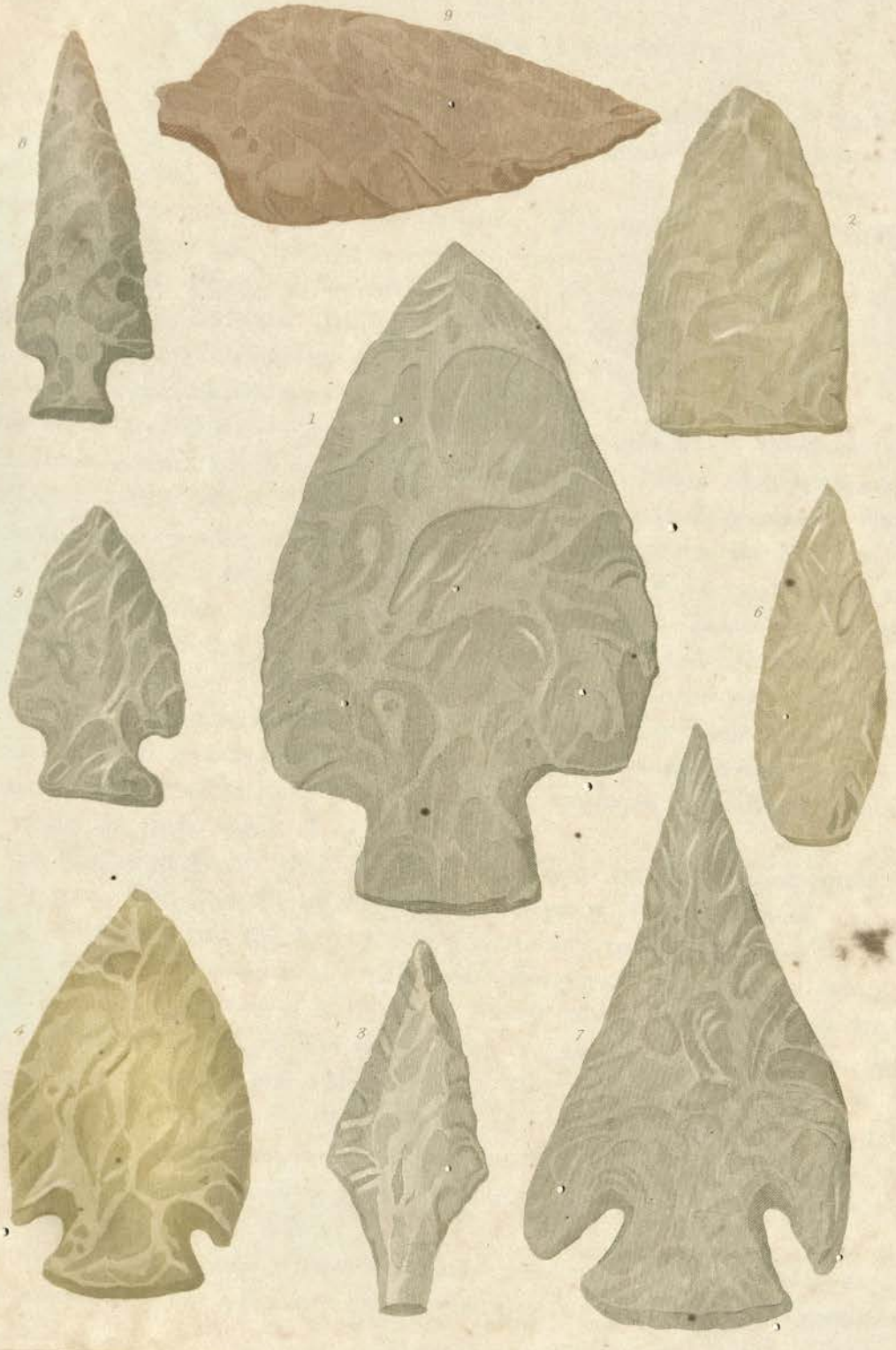
There is abundant evidence, in the ancient pestles found in the fields formerly occupied by Indian tribes throughout the Atlantic States, of the practice of using pestles for crushing it, above referred to. These pestles were generally made from a semi-hard rock, often grauwacke, or a kind of silicious slate. They were about ten inches in length, tapering to the top, and would weigh five or six pounds.

The following specimen (Plate 21, Fig. 1,) is from the Tawasantha, or Norman's Kill Valley, Albany County, N. Y. It is of the stratum of grauwacke rock, which lies in connection with argillite of that county.

There was an important mode of preparing the zea maize for the use of warriors who were expected to be out many days. The grain was reduced to a finer condition than samp, or hominy. It was then mixed with a portion of sugar, made from the acer saccharinum. The whole was put into a small leathern bag. This constituted the warrior's entire commissariat. Meats he was expected to kill by the way. The burthen was so light that it did not at all impede walking or running. When it was designed to use it, a small portion was mixed with water. It could not be eaten *dry*. The quantity of water might be enlarged, agreeably to the needs of the warrior. It was then, in fact, a species of *soup*; and the strength given by a single gill of the meal was sufficient for the day.

The piola of the Mexicans is a substance similar to that described above. It is parched corn well ground, and seasoned with sugar and spices. A gill of it per day is sufficient to keep a man alive.





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ARROW HEADS.

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9. Akeek, or Ancient Cooking Pot.

In a state of nature, boiling is performed sometimes by casting heated stones into bark vessels filled with water. One of our tribes, (the Assinoboins,) has been named, it is averred, from this custom. The Micmacs and Souriquois, and some other extreme northern tribes, boiled in this manner. The southern and south-west and midland tribes, from the earliest notices of them, possessed a species of kettle made from pottery, the art of making which was carried northward up the Mississippi Valley and to the great lakes. The Atlantic and New England tribes, whose traditions point south-west, had also, at the earliest recorded dates, a species of pottery, shreds of which are found at the sites of the oldest villages.

This article was extensively used among the Algonquin tribes, by whom it was called *Akeek*—a word which appears to have been composed from *Akee*, earth, and the generic *ik*, denoting something hard or metal-like. It was made of common clay, or clay-earth, tempered with feldspar, quartz, or shells. Sometimes the common black earth of alluvial lands was used by tribes in the South and West, and when so, sands or pounded shells were taken as the tempering ingredient. There was, generally, a ready adaptation to this purpose of the aluminous or other materials of the country possessed by the tribes. Thus the Florida tribes, who possessed rich black soils at the margins of their rivers, and an abundance of shells, made their vessels of these materials; while those tribes living on the banks of the Potomac, Delaware, and other Atlantic rivers, extending quite to the Penobscot, employed the different strata of clays which are to be found along those streams.

In the Mississippi Valley, there is also evidence in the remains of their pottery, of a better ware, formed of the mixed aluminous deposits of its tributaries.

As a general remark, the pottery was a ruder and coarser fabric, as the tribes migrated north. It was essentially with these tribes, an art of the women, who, by a natural law of the division of labor among hunter tribes, were responsible for the preparation for the board of the viands taken in the chase by the men. As a consequence, the potters' art, which fell into their division, did not *advance*, but continued stationary at a point, where it had at first been taken up. Among the Iroquois, a very warlike people, it was considered peculiarly the women's art,[1] and there is every reason to believe that it was thus considered by the Algonquins, Dacotas, and other generic tribes.

The finest and most compact species of pottery, is seen in their funereal vases and their pipes, which do not, however, equal the terra cotta. Even in the best specimens

[1] Notes on the Iroquois.

which have come to our notice, such as the specimens from the small sacrificial mounds of the Scioto, it falls far short of the quality of the Aztec ware, and infinitely so of the highly-wrought and superb fabrics of Peru.[1]

The akeek, (Plate 22, Fig. 1,) to which this article is particularly devoted, is in shape very nearly a globe, with one side opened and turned out as a lip. It has in no instance a foot. It may be used as in a sand-bath, or by a string around the lip, which is attached to a tripod, as seen in Plate 22, Fig. 2.

The only entire specimen of the northern akeeks which has been examined, was obtained in a cave on an island in the river St. Mary's, Michigan. It is deposited in the cabinet of the New York Historical Society.[2] (See Fig. 1.)

10. Discoidal Stones.

Games of various character have attracted the Indian tribes from the earliest notices we have of them. Some of these games are of a domestic character, or such as are usually played in the wigwam or domicil. Of this kind are the game of hunting the moccasin, the game of the bowl, and sundry minor games known to the Algonquins, the Cherokees, and other tribes. But by far the greater number of games practised by the North American Indians are of an athletic character, and are designed to nourish and promote activity of limb, and manual expertness in the field, or on the green. Such are their various ball plays, and wrestling and running matches, which whole tribes are assembled to witness and participate in. To run swiftly; to fend adroitly with the baton; to strike or catch; to lift great weights; to throw stones; to shoot darts; to dance with spirit; and, in short, to exhibit any extraordinary feat of agility, strength, or endurance in mimic strife, has ever been held to be among the principal objects of applause, especially in the young. It is, indeed, in these sports that the elements of war are learned; and it is hence that excellence in these feats is universally held up to admiration in the oral recitals of the deeds of their heroes and prodigies. Manabozho excelled in his superhuman and god-like feats, and killed the mammoth serpent and bear-king. *Papukewis* could turn pirouettes until he raised a whirlwind, and *Kwäsind* could twist off the stoutest rope. These things are related to stimulate the physical powers of the young; and there is not a tribe in the land, whose customs we know, of whom it is not a striking trait to favor the acquisition of skill in games and amusements.

Among these field sports, the casting of stones is one of the most ready and natural traits of savage tribes. With such accuracy is this done, that it is astonishing with what skill and precision an Indian will hurl stones at any object.

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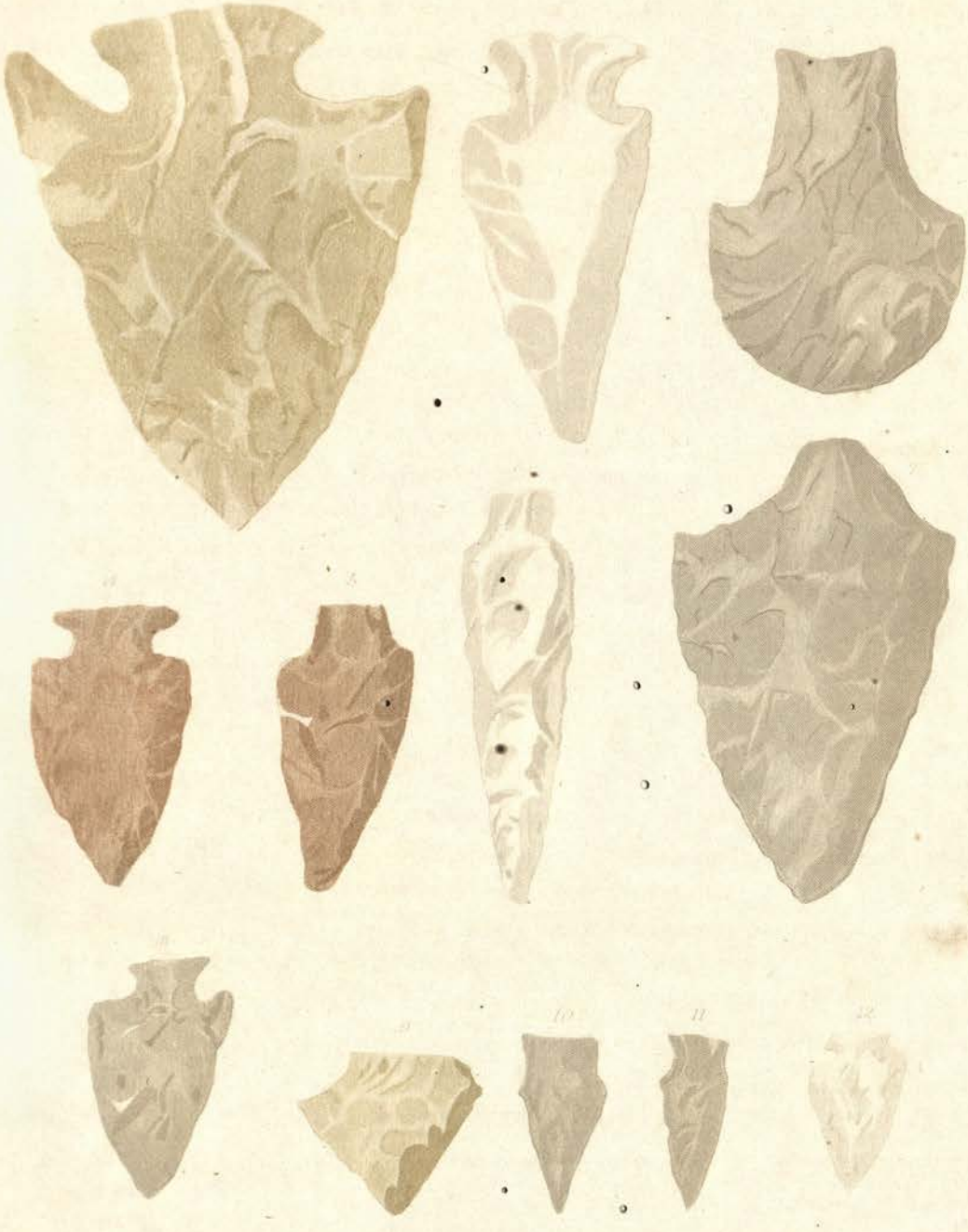
[1] Proceedings of the Northern Antiquarian Society.

[2] Notices of some Antique Earthen Vessels found in the Tumuli of Florida, &c. N. Y., W. Van Norden. 1846.



ARROW HEADS.

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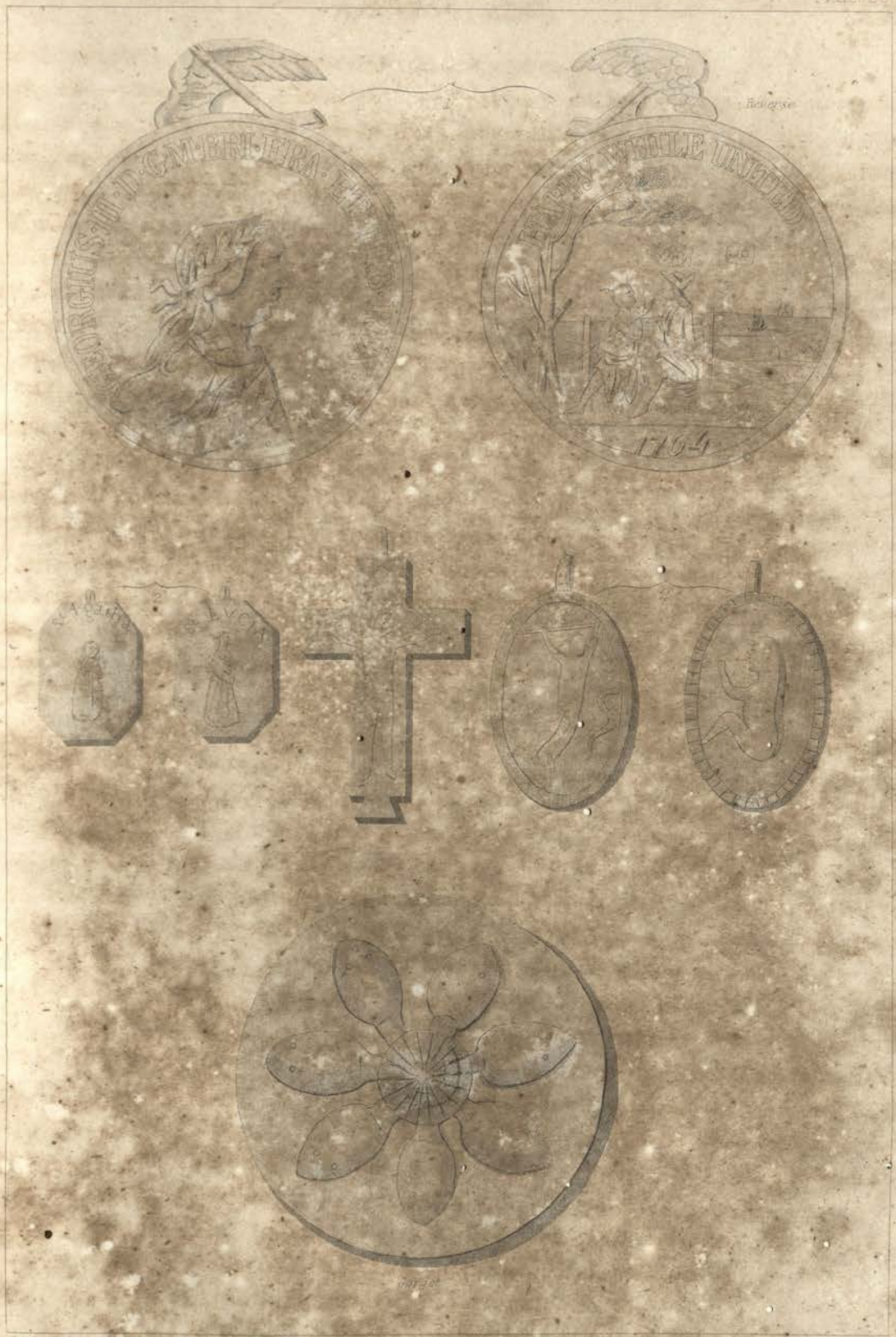

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THE MAL AND GORGET.

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The numerous discoidal stones that are found in the tumuli, and at the sites of ancient occupancy, in the Mississippi Valley, serve to denote that this amusement was practised among the earlier tribes of that valley at the mound period. These antique quoits are made with great labor and skill, from very hard and heavy pieces of stone. They are, generally, exact disks, of a concave surface, with an orifice in the centre, and a broad rim. A specimen now before us, from one of the smaller tumuli at Grave Creek Flats, in the Ohio Valley, is wrought from a solid piece of porphyry. It is three and a half inches in diameter, with a thickness of one and five-tenths inches. The perforation is half an inch, and the rim, forming the disk, a small fraction under the same.

The object of hurling such an instrument was manifestly to cover an upright pin or peg driven into the ground. Whether, like the ancient Greeks, in hurling their discus a string was used to give additional velocity and direction to its motion, cannot be stated.

These ancient instruments are of various sizes, but all unite in the same principles of construction. One of the specimens observed at the same locality is one and four-tenths inches in diameter. The following sketch (Plate 23, Figures 1 and 2) is an accurate copy of the larger specimen we have described, of the exact size. Figures 3 and 4 represent the smaller ones, and it is supposed were made for children's use.

11. Funeral Food—Vase.

The idea of placing food in or near the grave, to serve the departed spirit on its journey to the fancied land of rest in another world, is connected with the ancient belief in a duality of souls. This idea is shown to exist among the present tribes of the United States.[1] One of these souls is liberated at death, but the other is compelled to abide with the body; and it is to provide for this, that a dish or vase of food is deposited generally at this day, not in the grave, to be buried with the corpse, but under a close covering of barks erected over the grave.

The ancient Indians placed this food in a vase of unglazed pottery, in the grave. This pottery, as disclosed by graves, is of a dark color, and consists of clay and shells slightly baked. The vase is generally small, sometimes not more than six inches in height, but varying from nine to ten; it is seldom more. It is uniformly without a foot, and with the lip slightly turned, and externally ornamented. The ornaments are impressed on the vase in its soft state, and unpainted.

Nearly every ancient Indian grave that has been opened in the State of Tennessee, has one of these ancient vases, or "crocks," as they are popularly called. Their use can hardly be imagined without adverting to this ancient custom.

[1] Vide Oneota, or the Indian in his Wigwam.

The small burial mounds of Florida, along the Gulf coast, are literally filled with these antique vases. These places of sepulture are locally denominated "feasting mounds," from an evident impression that the ancient vases were dedicated to some purpose of this kind. It appears to be a peculiarity in those found near the Appalachicola, as observed by Mr. Hitchcock,[1] that the bottom of each vase is pierced with a small orifice broken in. In a specimen recently forwarded by Mr. Buckingham Smith, from an island in the Everglades of Florida, it is impossible to decide, from the broken fragments, whether this custom holds good. But it coincides in its make and material, with the specimens from Appalachicola now in the antiquarian collections of the New York Historical Society.

A specimen of this vase in a good state of preservation, was obtained from an antique grave in Ohio, by Dr. A. Crookshanks, in 1844, agreeing in its character with those of Florida. It is entire. The material, — a dark-colored, micacious clay, — is tempered with shells. It bears the evidence, as to all the specimens examined, of being made by hand. It is unglazed.

Another specimen of the funereal vase was obtained by Mr. Hosmer, from an antique grave opened on the banks of the Genesee River, in New York.

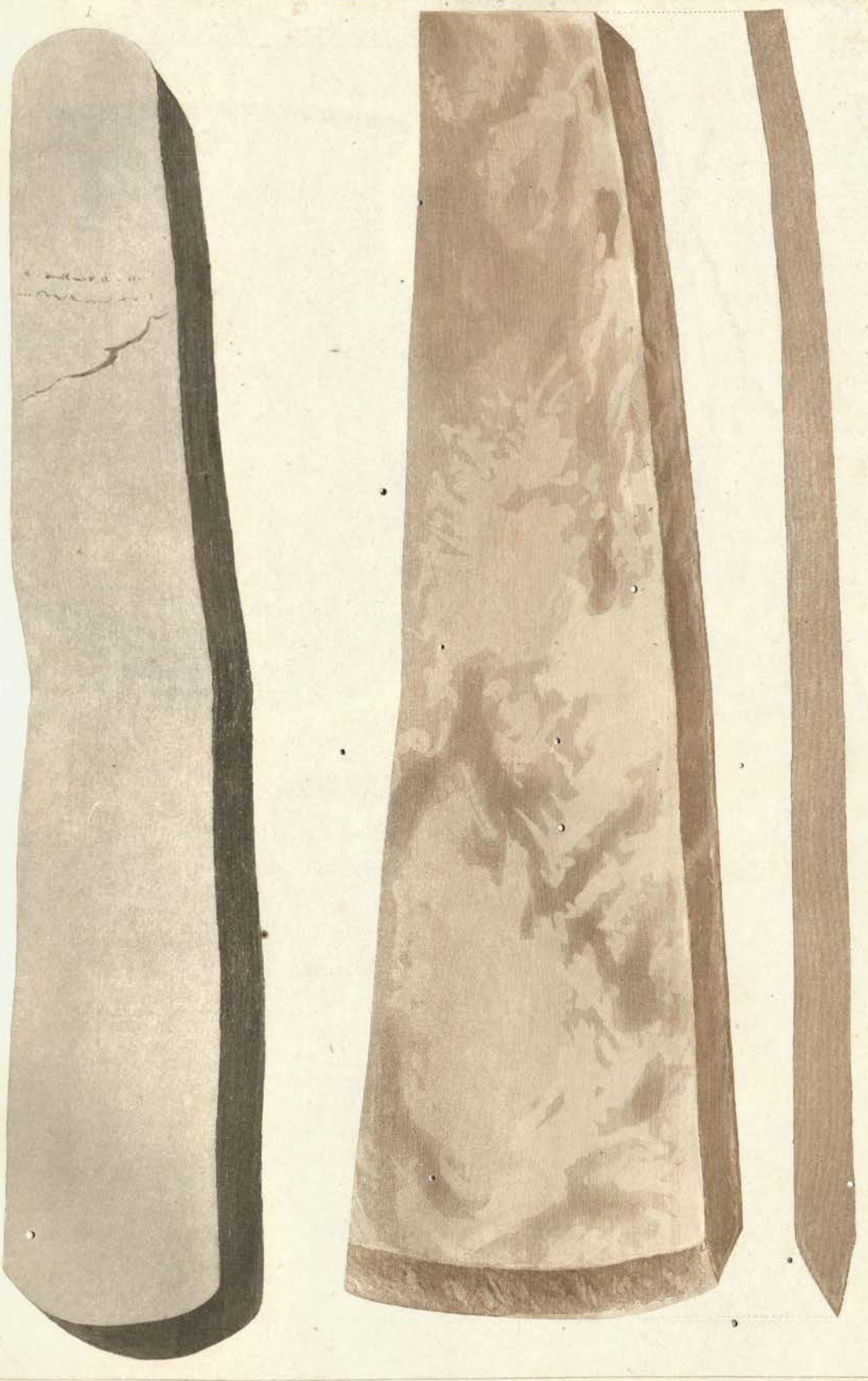
The late Dr. Douglas Houghton obtained fragments of the same species of ware, from some ancient works existing in Chatauque County, New York. This locality is near the village of Fredonia, but a little distance from the banks of Lake Erie. Dr. Houghton found at the same place, and made of the same material, the fragment of a small but curious clay image, which was ornamented with a head-dress resembling very accurately the skin of a bear's head; the nose pointing directly in front.

The great extent of country over which the vases prevail, denote the general prevalence of the custom at the ancient era of these graves, and of the mounds and earthworks which exist. The following drawing, (Plate 27, Fig. 3,) which may serve as a type for all, size excepted, is executed from a specimen obtained in Florida.

12. Coin, or its Equivalent.

The discovery of America caused a total revolution in the standard of value among the Indian tribes. Exchanges among them had been adjusted to a great extent, by articles in kind. Among the northern tribes, skins appear to have been a standard. A beaver skin long continued to be the *plus*, or multiple of value. But however general this standard might have been, it is certain that among the tribes seated along the north Atlantic, some varieties, or parts of species of sea-shells, under the names of *peag*, *seawan*, and *wampum*, became a sort of currency, and had the definite

[1] Proceedings of the New York Historical Society.



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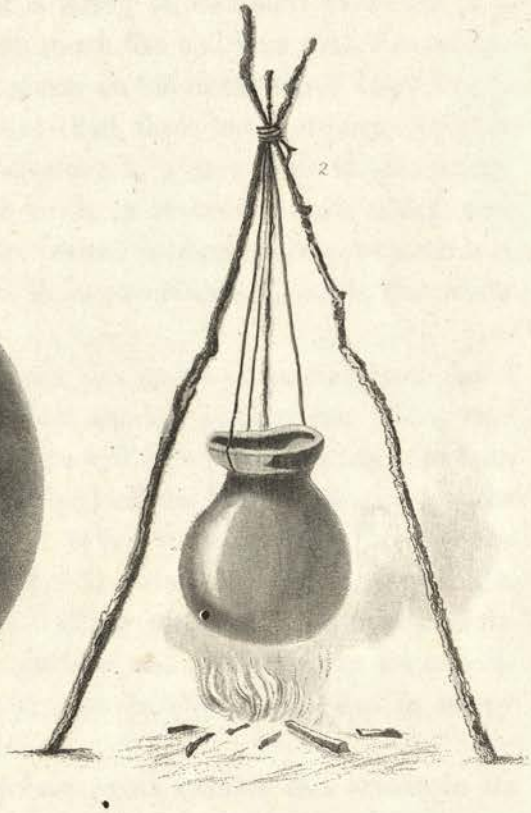

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COOKING POT AND VASE.

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arithmetical value of coin. In New England a string of wampum consisted of a definite number of grains, the whole of which was worth five shillings. At Manhattan and Fort Orange, it appears from ancient documents on file in the State Department at Albany, as stated by Dr. O'Calligan, that about 1640, three beads of purple or blue wampum, and six of white wampum, were equivalent to a styver, or to one penny English. It required four hundred and fifty beads to make a strand, which was consequently valued at $1.50. At a subsequent period, four grains of sewan made a penny. Purple wampum was made from the Venus mercatorius, while the white was taken from the pillar of the periwinkle.

In opening ancient graves in Western New York, this ancient coin has been found in the shape of shell-beads, some of which are half an inch in diameter. The same article has been disclosed by the tumuli, and graves of the West. It has also been taken from the plains of Sandusky, and from the locations of Indian graves near Buffalo, and north of the Niagara river in Canada. It is at these localities precisely the same article. Not less than seventeen hundred of this shell coin were taken from a single vault in a tumulus in Western Virginia. It has sometimes been improperly called "ivory" and "bone." It is of a limy whiteness and feel, from the decomposition of the surface, and requires care to determine its character. But in every instance it is found to yield a nucleus of shell.

Figures 1, 2, 3, 4, 5, 6, Plate 24, in the subjoined print, exhibit this article in its several sizes.

13. Balista, or Demon's Head.

Algonquin tradition affirms, that in ancient times during the fierce wars which the Indians carried on, they constructed a very formidable instrument of attack, by sewing up a large round boulder in a new skin. To this a long handle was tied. When the skin dried, it became very tight around the stone; and after being painted with devices, assumed the appearance and character of a solid globe upon a pole. This formidable instrument, to which the name of balista may be applied, is figured (Plate 15, Fig 2) from the description of an Algonquin chief. It was borne by several warriors, who acted as balisteers. Plunged upon a boat, or canoe, it was capable of sinking it. Brought down among a group of men on a sudden, it produced consternation and death.

14. Medaëka, or Amulets.

Charms for preventing or curing disease, or for protection against necromancy, were the common resort of the Indians; and they are still worn among the remote and less enlightened tribes. These charms were of various kinds; they were generally

from the animal or mineral kingdom, such as bone, horn, claws, shells, steatites, or other stone of the magnesian family.

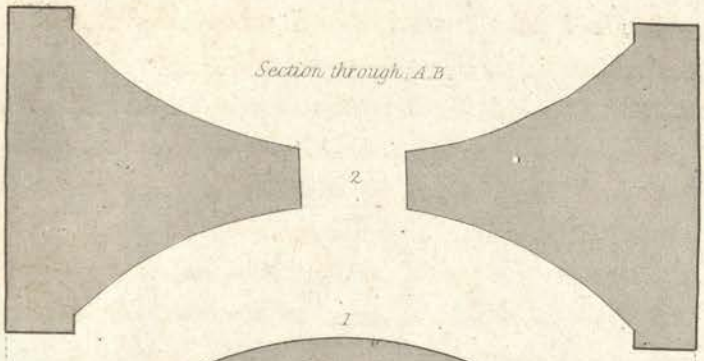
The Indian philosophy of medicine greatly favored this system of charms. A large part of their materia medica was subject to be applied through the instrumentality of amulets. They believed that the possession of certain articles about the person would render the body invulnerable; or that their power to prevail over an enemy was thus secured. A charmed weapon could not be turned aside. The possession of certain articles in the secret arcanum of the *gush-ke-pi-tá-gun*,[1] or medicine sac, armed the individual with a new power; and this power was ever the greatest, when the possession of the articles was secret. Hence secresy in the use of their necromantic medicines was strictly enjoined. There was a class of charms that might be thrown at a person, and the very gesticulation, in these cases, was believed to be enough to secure efficacy. The mere thrusting of a Meda's sac towards an individual was deemed to be efficacious. A beam of light was often sufficient, in the Indian's eyes, to be charged with the fatal influence. Where the doctrine of necromancy is believed, it is impossible to limit it, and the Medas, who had learned their arts from regular profession in the secret chamber of the mystical lodge, formed a class of persons of whom the common people were in perpetual fear. The term *medäëka*, which is applied to this class of things, relates to any article worn openly, or concealed about the person, to which the doctrine of medical magic might be applied.

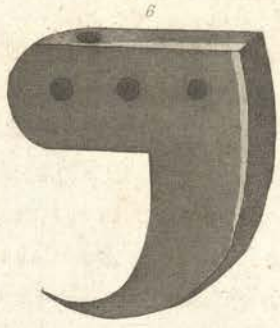
The variety of articles actually worn to ward off evil influences was very great. Some form of a sea-shell, manufactured or unmanufactured, was regarded as a common protective, or amulet, by most of the tribes. This passion for shells from the sea was peculiar. The sea appears to have been invested with mystical powers. It was regarded as one of the most magnificent displays of the power of the Great Spirit or Deity, and a product rolled up from its depths, colored and glittering, as the nacre of oceanic shells, was regarded as bearing some of this great mysterious power. The venus mercatorius was thus prized, and various articles of ornament, which they deemed sacred, were made from them. Such were the ancient and the modern *wampum*, strings of which were worn about the neck, and delivered as mementoes at the ratification of their most solemn covenants.

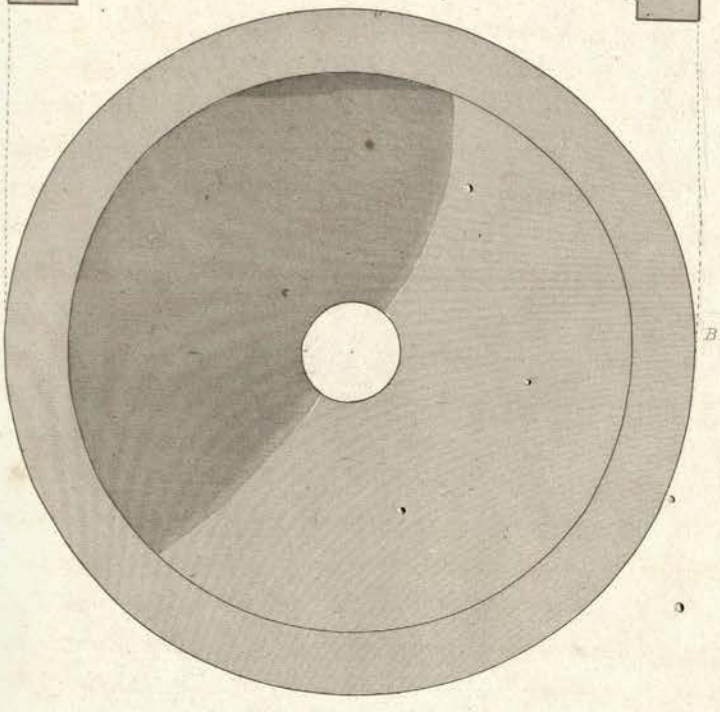
Ear-drops and nose-drops were anciently made from shells, and they were worn, not merely as ornaments, but as protective. A necklace of the claws of the grizzly or black bear, was supposed to impart some of the powers of the animal. The red pipe-stone of the Coteau des Prairies was carved into various ornaments, and worn about the neck, or suspended from the ears. It is impossible to tell what form this desire might not take among a people whose superstitions were so varied and subtle.

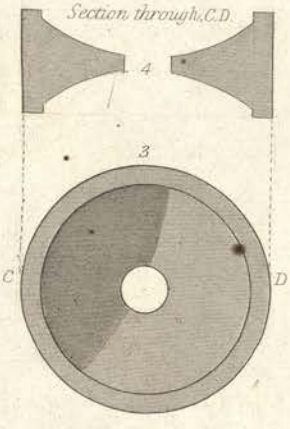
Articles which had served the purpose of amulets in life were deposited in the

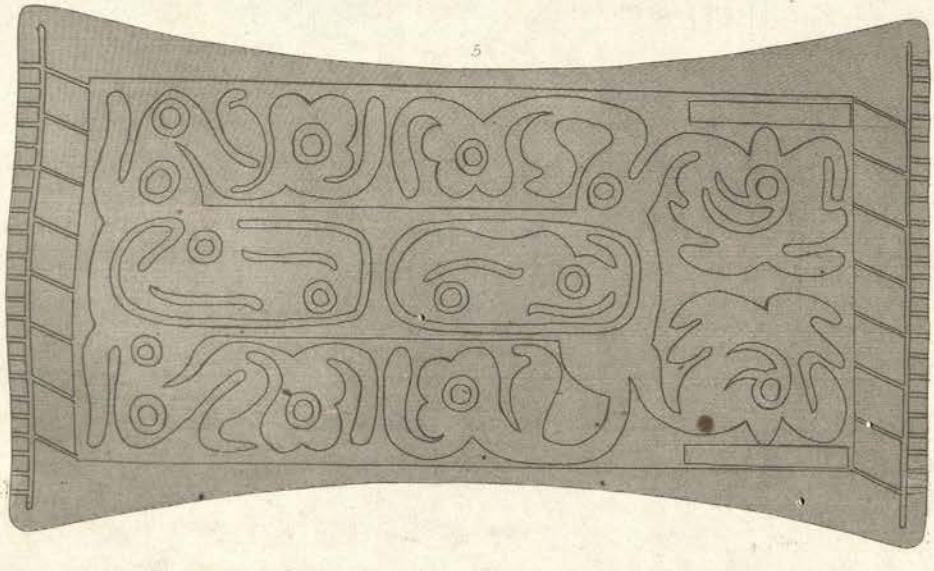
[1] Algonquin.











Drawn by Capt. S. Eastman U.S.A.

DISCOIDAL STONES AND BLOCK PRINT

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tomb,—for the Indian futurity is not a place of rest; and the hunter's soul, in its uneasy wanderings, still had occasion for the protecting power of the charm. Hence, in opening ancient graves and tumuli, it is found that the amulets to which the deceased was attached in life were deposited with the body.

The subjoined specimens are given from the two periods of *post* and *ante*-Columbian antiquities. (Figs. 1, 2, 3, 4, 5, 9, 11, Plate 25.)

The antiques of this character, formed from the much-prized sedimentary red pipe-stone deposit of Minnesota, are figured in 7, 23, 25, 26, 27, and 28, (Plate 25,) together with amulets made from various kinds of stone or bone. In Figures 8, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23, Plate 25, and Figures 7, 8, 9, 10, and 11, Plate 24, we observe the change which this passion underwent among the tribes, on the introduction of various shaped beads of glass and coarse enamel by Europeans, at, and after, the opening of the 16th century. Farther evidences of this kind are observed in Figures 1, 2, 3, and 4, Plate 32, under the guise of metallic rings, distributed by the early missionaries. These specimens were obtained in the area of the ancient French colonization, in Onondaga, New York.

15. Antique Javelin, or Indian Shemagon or Spear.

This antique implement was one of the most efficacious, in close encounters, before the introduction of iron weapons.

A fine specimen of it was brought to me, at Michillimackinac, in (August) 1837, by a noted chief, called Mukons E-wyon, or the Little Bear Skin, of the Manistee river of the northern peninsula. The following is a *fac-simile* of it. (Plate 26, Figure 2.) The material is of a yellowish chert. It is seven inches long, and one and a half wide at the lower end, which is chipped thin to admit the splints by which it was fastened to the staff.

The length of the pole or staff could only be conjectured, and was probably five feet. The chief said, on presenting it, that it was one of the old implements of his ancestors.

Figures 1, 3, 4, Plate 26, are *fac-similes* of several fine specimens of spear-heads, now in possession of the National Institute, Washington, D. C.

16. Aishkun, or Bone Awl.

Men's and women's clothes were before the discovery made of skins, or dressed leather. It was necessary to the formation of garments for the body and legs, and

shoes for the feet, that some hard and sharp instrument should be employed, capable of readily penetrating the skin or leather. The method of the ancient species of sewing of our tribes, resembled that of a modern cordwainer rather than of a seamstress or tailor. Leather, dressed or undressed, being the material to be put together, this was accomplished by making holes in the edges of the garment or skin, and pushing through these the ends of deer sinews, or other fibrous integument. For this purpose the small and compact end of a horn, which is called *aishkun* by the Algonquins, was taken. Sometimes a rib bone, and at others the tibia of animals, was used. These articles are still employed for this purpose, for coarse work, among the remote tribes. These awls were of various sizes, as shown in figures 1, 2, 3, 4, 5. Plate 27.

The metallic needle is one of the articles supplied to these tribes by civilization. Sewing and the seamstresscal art, is an incident of high civilization.

17. Bone-Shuttle.

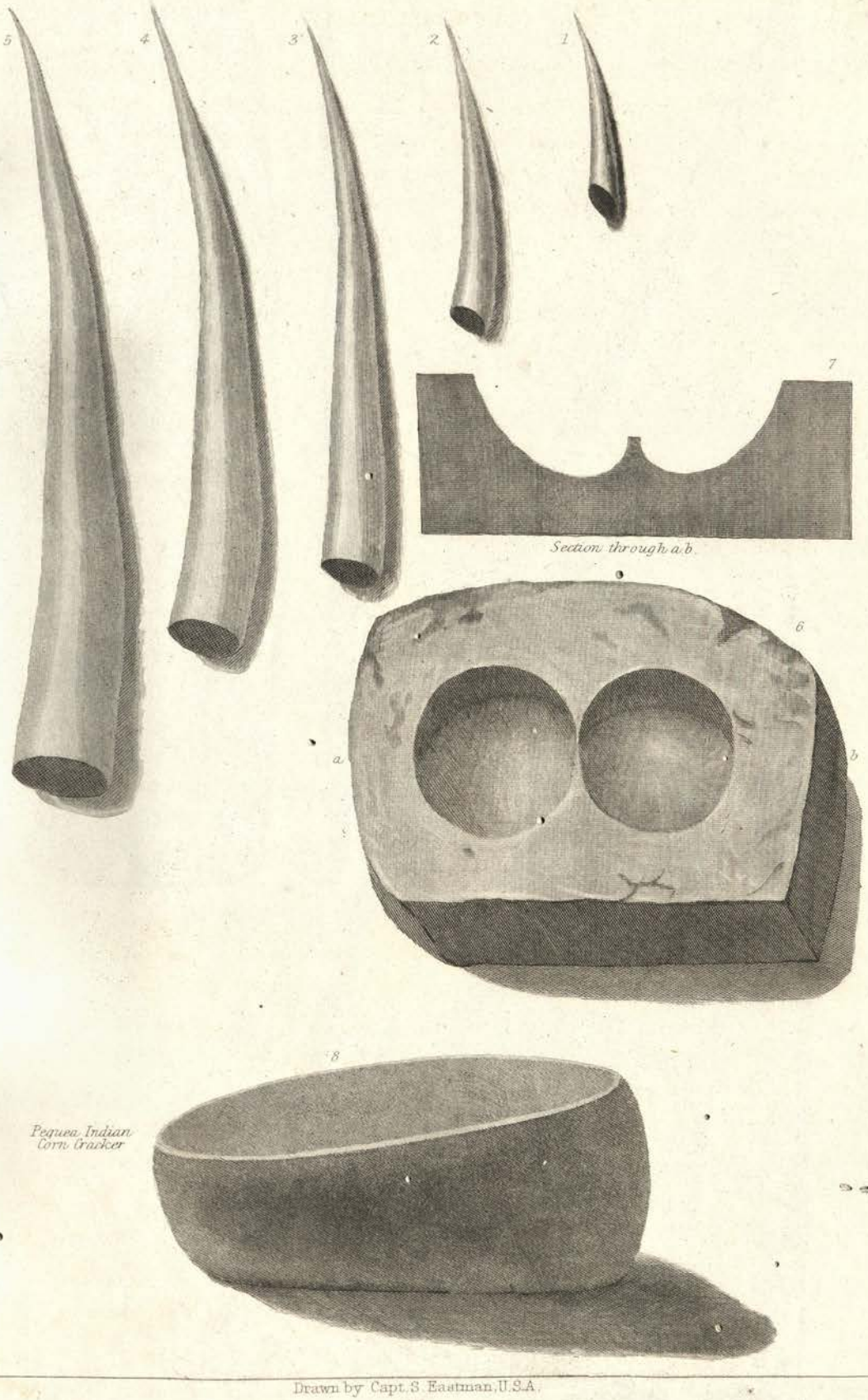
In making their mats or rude lodge-tapestry, and other coarse fabrics, the aborigines employed an instrument of bone, of a peculiar construction, which has the properties of a shuttle. It was designed to introduce the woof in preparing these fabrics, as they did, from rushes and other flexible materials used for the purpose. The art was rude, and of a kind to fall into disuse, by the coast tribes, as soon as European manufactures were introduced. It is therefore, when found in opening graves, &c., a proof of the ante-European period.

One of these antique implements, herewith figured, (Plate 28, Fig. 1,) was disclosed about 1835, in opening an old grave, in the course of some excavations which were undertaken within the enclosure of Fort Niagara, N. Y. This grave must have been older than the origin of that fortress, the foundations of which were laid by La Salle among the Seneca Iroquois, in 1678.

This instrument is constructed of finely polished bone. It is ten and a half inches in length, perfectly round, about one eighth of an inch in thickness, and has a double barbed head one and a quarter inches in length. Between the barbs, is a mouth or slit, which would enable it to carry the thread across and through the warp. The instrument is slightly curved, probably owing to the difficulty of finding one of so fine a quality, perfectly straight.

18. Ice Cutter.

All the tribes of high northern latitudes employ, at the present day, a chisel of iron of peculiar construction, during the winter season, to perforate the ice of the lakes and rivers, for the purpose of fishing and taking beaver. This instrument replaces in



Drawn by Capt. S. Eastman, U.S.A.

AWLS. ANTIQUE MORTAR AND CORN CRACKER.

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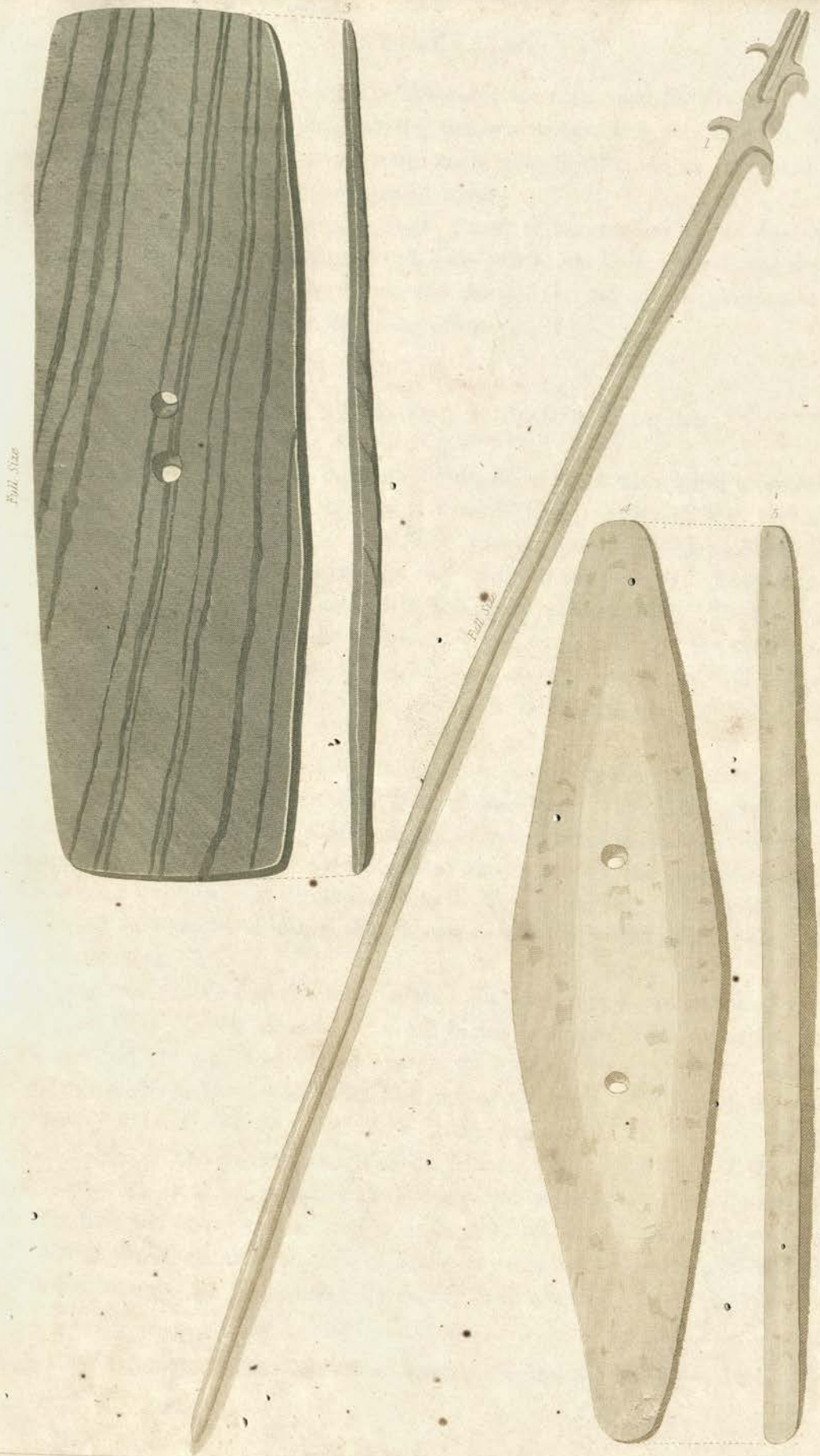
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the history of their customs, a horn, which their ancestors used for the same purpose. The practice prevails particularly among the lake tribes, who rely much on fish for their subsistence, and reaches so far south as N. latitude 40°, and as far inland as the streams and waters become permanently frozen.

The ancient horn consisted of a single prong of the antlers of the deer or elk. This was tied firmly to a handle of wood, four or five feet long. We should not know of this ancient instrument, were it not that the natives call at our government shops for an iron chisel, to perform the same office.

19. Reed, for Rope or Twine Making.

We can refer to no period of their traditions, when the Indian tribes were destitute of the art of making twine, and a small kind of rope. Although they had not the hemp plant, there were several species of shrubs spontaneously produced by the forest, from the inner bark of which they made these articles. They fabricated nets for fishing, which are referred to in their ancient oral tales. To tie sticks or bundles, is one of the oldest and simplest arts of mankind; and the verb *to tie* has, therefore, been selected by some philologists, as one of the primitives.[1] It is, however, a compound, consisting of a *thing* and an *act*, in all the Algonquin dialects known to us.

The process of twine and rope making, from the barky fibre of certain plants, it appears, was one connected with some kind of machinery. From the species of stone reed that is found in some of their tumuli, whose object was, to hold the strands or plies apart, it is probable that a wooden instrument, having the properties of a rope-maker's hand-windlass, was employed to twist them together. Yet if this was not done, — and we have no evidence that it was, — the reed would afford some facilities for hand-twisting.

We have two remains of this instrument. The first was found in the upper vault of the great Grave Creek Mound. It is six inches in length, with two orifices for the twine, one and three-quarter inches apart, and tapering from the centre, where it is one and two-tenth inches broad, to half an inch at the ends. Thickness, three-tenths of an inch. Figs. 4 and 5, Plate 28, is a fac-simile of it.

The material of this instrument, examined in the dim candle-light of the rotunda which existed under this mound in 1844, could not be satisfactorily determined. It was of a limy whiteness, rather heavy, and easily cut. If a metal, covered deeply by a metallic oxide, which it resembled, that fact could not be determined without the application of tests, for which no opportunity was afforded.

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[1] Vide letter of the late Mr. Gallatin, issued by Mr. Barbour, Sec. of War, 1824.

The other specimen of this antique instrument before us, (Figs. 2 and 3, Plate 28,) is two-tenths of an inch less than six inches in length, one and one-tenth wide in the middle, gently curving, to one and five-tenths at the ends. It has two orifices for the twine, half an inch apart. Thickness two-tenths of an inch, nearly. It consists of a piece of striped silicious slate. It is accurately carved. It was disclosed in one of the ancient but smaller mounds of the Grave Creek Flats.

20. Antique Mortar.

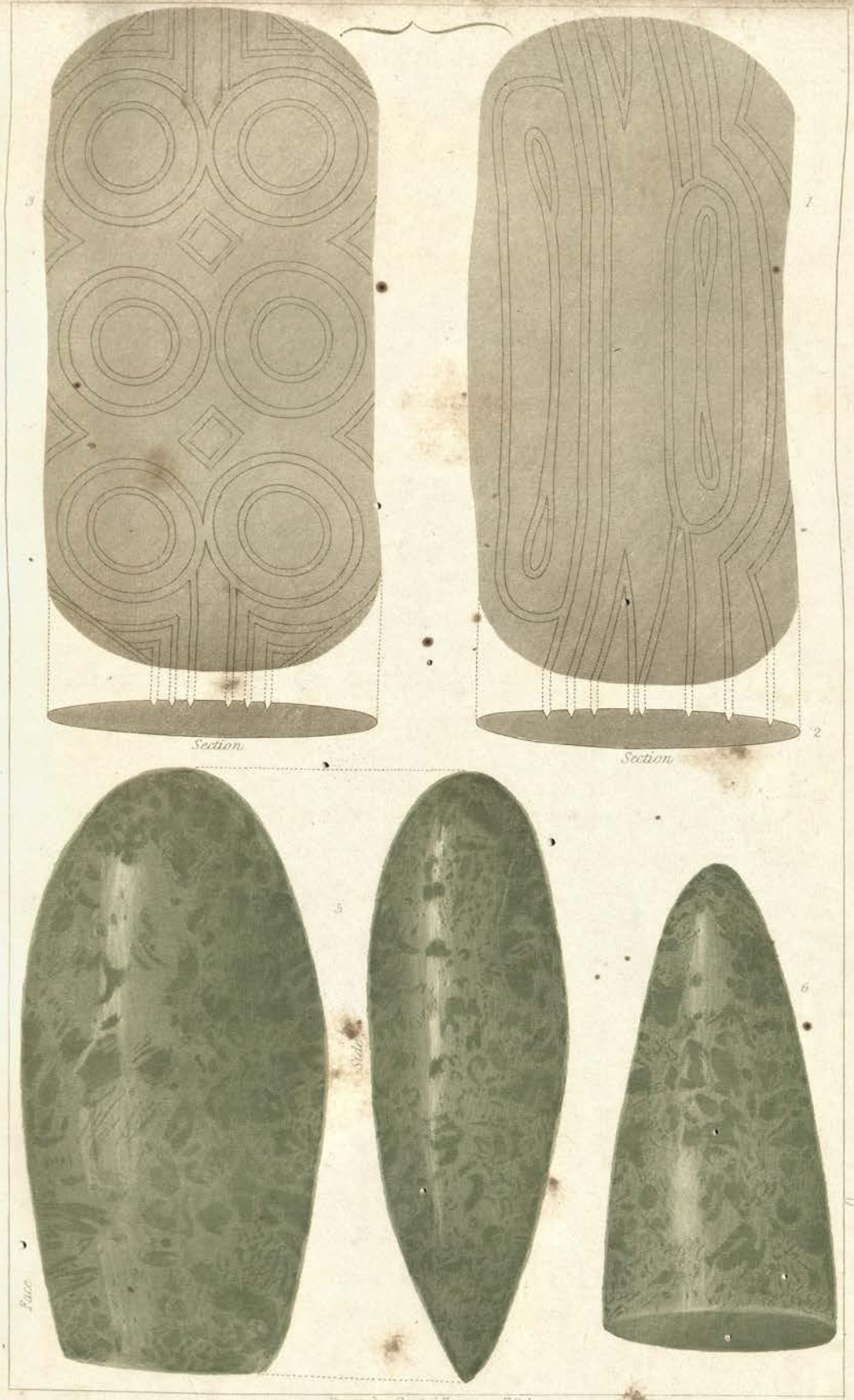
This instrument was used by the aborigines of this continent, for crushing the zea maize, and for reducing quartz, feldspar, or shells, to a state which permitted it to be mixed with the clays of which their pottery was made. The first use is best exemplified by the excavated block of stone, formerly and still employed by the Aztecs, for making tortillas.

Of the mortar for pounding stones to temper their pottery, a specimen is herewith figured, (Figs. 6 and 7, Plate 27.) This ancient implement, which is double-chambered, was discovered by the writer in the Seneca country, in the vicinity of Buffalo city—the ancient *De-o-se-o-wa* of the aborigines. It consists of a heavy and angular block of the cornutiferous limestone of Western New York.

Fig. 8, Plate 27, is a corn-cracker of the Paquea Indians. It is of very hard stone, and was found on the Potomac. This specimen is in possession of the National Institute, at Washington, D. C.

21. Stone Block-Prints.

The Islanders of the Pacific Ocean fabricate a species of cloth, or habilimental tapestry, from the fibrous inner bark of certain trees. This bark is macerated, and extended into a comparatively thin surface by mallets of wood or stone. When the required degree of attenuation has been attained, the pieces are dyed, or colored with certain pigments, or vegetable concoctions, known to them. To impart regularity to the patterns, blocks or prints are applied. The coloring is wholly external; in no instance, of many specimens examined, does it extend through, or on both sides of the bark. A proof entirely conclusive that it has not been dipped, or immersed in a vat. It is not easy to determine whether a mordant has been used to set the dye or decoction. From several specimens from the Owyhee, or Sandwich Island group, herewith figured, (in Plate 30, Figures 4, 5, and 6,) which have been deposited in our cabinet for upwards of twenty years, the coloring matter appears to be quite permanent. It has, at least, resisted the rays of light, with but little change, during



Drawn by Capt S Eastman, U.S.A.

BLOCK PRINTS AND FLESHING INSTRUMENTS.

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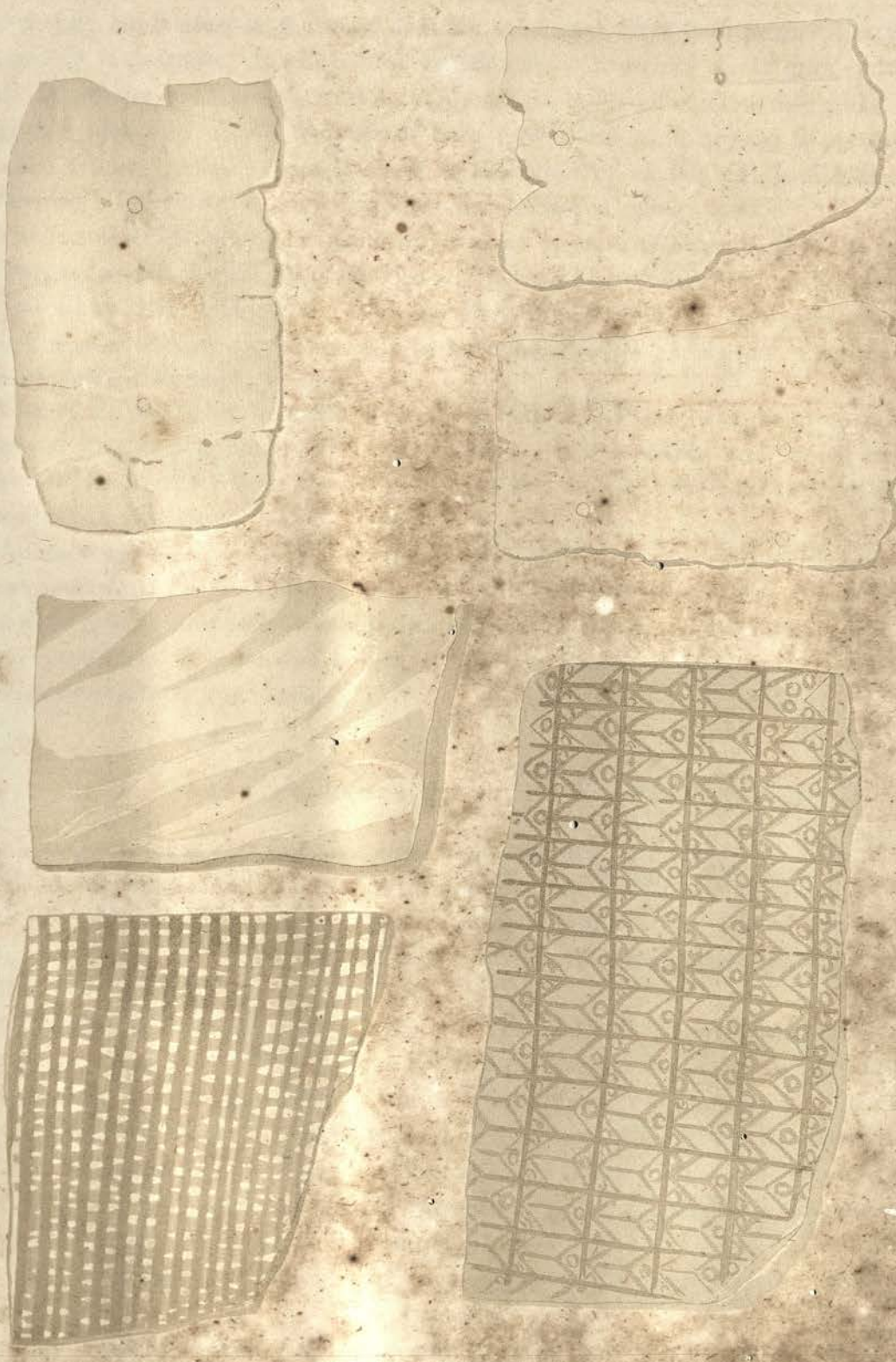

Drawn by Lieut. S. Ebbinghaus, U.S.A.

SPECIMEN OF CLOTH FROM SANDWICH ISLANDS.

[illegible] PHILA.

that period; but it must be remarked that the specimens have been protected, a part of the time, in drawers. It will be observed that the yellows and blacks have endured best. A carmine-red has endured tolerably; a light brick-red exhibits no change.

From a specimen of this Polynesian bark now before us, it appears to possess an alkaline property, which gives it some of the qualities of felt. It is fibrous and tubercular. Long keeping, in a dry place, has developed spongy spots.

This art of cloth-making for summer garments appears to be confined to the tribes of Polynesia; but the natives of Mexico and Peru, who had the cotton plant, perhaps the *mien kwa* of the Chinese, and made garments from it, used the block-print to figure it. Traces of this art appear recently to have been found among the antiquities of the Mississippi Valley.

One of these blocks, herewith figured in Plate 23, Fig. 5, was disinterred from a mound in the city plot of Cincinnati in 1841. It is described and figured in the second volume, page 195, of the Western Pioneer. It is a stone, whose species is not described.

Another was discovered by the writer, in the collection preserved in 1844, at the great mound of the Grave Creek flats, and is figured in Plate 29, Figs. 1 and 2, and described in the first volume of the Transactions of the American Ethnological Society, page 400. It was found in one of the minor mounds of those flats. It is a species of yellowish sandstone.

22. Fleshing Instrument, or Stone Chisel.

It is known that in skinning an animal, there will always remain some parts of the flesh and integuments to the skin. With a hunter, the operation of skinning is often done in haste, and when there is ever so much leisure, still the fear of cutting the skin, induces the flayer rather to infringe upon the carcase than endanger the value of the hide.

In the hunter state of society, it becomes the duty of the women to dress and prepare the skins taken in the chase. For this purpose, the skins are stretched in the green state on a frame, and the flesh and integuments are cleanly removed. This was done in the early times, by means of an instrument of stone, which has often been mistaken for a small axe. It is a species of hand chisel, blunt that it may not cut the skin, and yet of sufficient edge and hardness to permit a stout jerking blow. It was grasped firmly by the top. It required no crease, as if to bind it. It was often very rude, and presented nothing but an elongated stone, small, and brought to a blunt edge.

By this means, the skin of the deer and other animals was completely rid of its adhering flesh, prior to the process of currying, braining, smoking, or such other processes as it required to fit it for the various uses to which it might be devoted.

Two figures of the instrument are added. Figure 5, Plate 29, was picked up, in 1818, on the Missouri shore, on the high ground above the Chain Rocks. It is a fine porphyry, and exhibits much labor bestowed in rubbing it down. Figure 6 is from the banks of the Ohio, at the Grave Creek Flats. It is a silicious slate.

Another specimen of this instrument is seen in Plate 11, Fig. 4.

23. Antique Indian Knife.

Various substances have been used to supply the purpose of a metallic knife. The Peruvians and the Aztecs, at the epoch when the Spanish appeared among them, employed obsidian — a species of volcanic rock which exists in the Andes and the Cordilleras. Specimens of this article have been found in the western barrows, where, however, it seems most probable they came by traffic. We may suppose, in other instances, that tribes displaced along the Gulf shores brought them to new locations.

Generally our United States tribes employed flint, chert, horn-stone, or some other form of the silicious class. The first wants of society are easily supplied. Teeth are a primitive resource in savage nations, and any accessible hard and sharp substance comes next. It is well attested that the Appalachian tribes, who all lived in the latitudes of the cane, used that very hard and durable substance to fabricate knives.

24. Ancient Stone Bill, Pointed Mace, or Tomahawk.

The pointed mace, found in the early North American graves and barrows, is uniformly of a semi-lunar form. It appears to have been the *Cassetete* or head-breaker, such as we can only ascribe to a very rude state of society. It was employed by warriors prior to the introduction of the *agakwut* and *tomahawk*. All the specimens examined have an orifice in the centre of the curve for the insertion of a handle. Its object was to penetrate, by its sharp points, the skull of the adversary. This was not done by cutting, as with the agakwut or mace, but by perforating the cranium by its own gravity, and the superadded force of the warrior. In an attack, it must have been a powerful weapon.

A specimen (Figure 1, Plate 11) obtained through the intervention of F. Follett, Esq., from a small mound on the banks of the Tonawanda, near Batavia, N. Y., is of the following dimensions. Length, eight inches: breadth, one and a half inches: thickness, about one and a quarter inches.

The material is a neutral-colored silicious slate, exquisitely worked and polished. Its weight is half a pound.

Another specimen (Figure 2, Plate 11) from Oakland county, Michigan, has both

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COPPER WRIST BANDS

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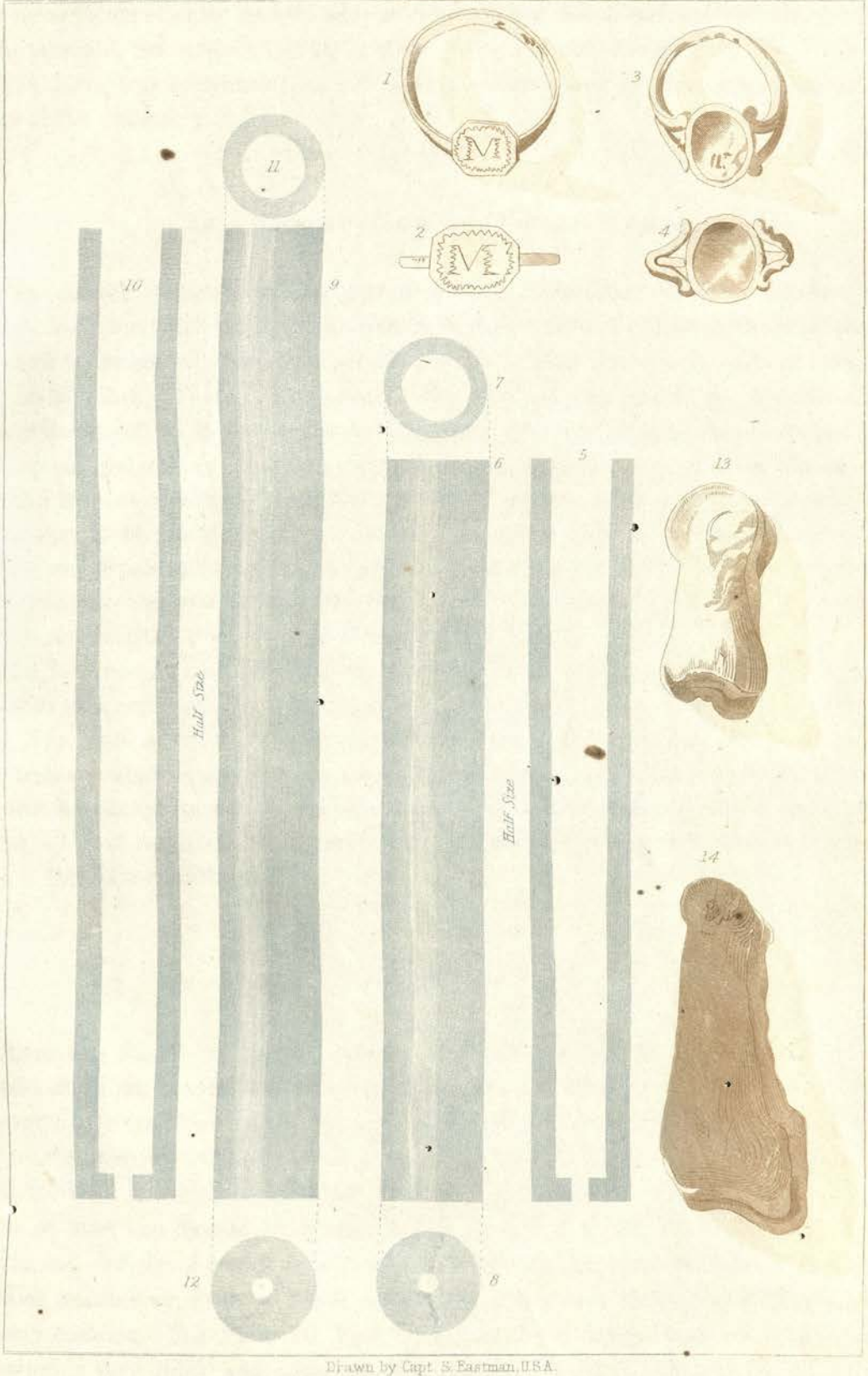


Drawn by Capt. S. Eastman, U.S.A.

BRASS RINGS. STONE TUBES.

the lunar points slightly broken off, yet it weighs six and a half ounces. It is of the same material, but striped. It is, in all respects, a stouter instrument.

The use of this instrument, as well as the antique spear or shemagun, mark an era prior to the discovery.

25. Copper Arm or Wrist-Bands.

The antique specimens of this part of personal decoration, which are furnished by graves and tumuli, do not differ essentially in their mechanical execution, from similar productions among the remote tribes of this day. They are simple rings or bands of the metal, bent. There is no union of the bent ends by soldering. Oxidation has nearly destroyed them, in the mound specimens which have come to our notice. In the specimens, (Plate 31,) exhumed from the western part of Virginia, at the Great Tumulus of Grave Creek Flats, a salt of copper, apparently a carbonate, was formed upon the metal in such a manner as to protect it from further oxidation.

The use of this metal appears to have been very general by the American tribes at, and prior to, the era of the discovery; and the occurrence of the ornaments in graves and tumuli may be generally set down to that era.

The fur trade, which immediately succeeded the arrival of the first ships, soon replaced this rude ornament, by bands and bracelets of silver, or silvered copper and tin. The passion for silver, in all its manufactured forms, was early developed among the tribes. They regarded it as a nobler metal than gold. The name for gold, in all the languages known to us, is a modern descriptive phrase, signifying yellow metal. It would appear, that gold is not a product of the countries or islands from which the tribes originated.

26. Anomalous Objects of Art and Custom.

There was found, on opening some of the minor mounds of the Ohio Valley, a species of tubes, carved out of steatite, which attracted attention. These tubes appeared to have been bored by some instrument possessing a degree of hardness superior to steatite. One end was entirely open; the other had a small aperture, as if it had been intended to facilitate suction, by a temporary rod and valve. Specimens of these are figured in Plate 32, Figs. 5, 6, 7, 8, 9, 10, 11, 12.

The same district of country disclosed, by its tumuli, large masses of the silvery kind of mica, which may, from its small perforations, have been designed for ornamenting ancient costume. See Plate 30, Figs. 1, 2, 3. Other mounds of the same region contained a very thick and heavy species of pottery, which seemed, from its frag-

ments, to have been employed for saline kettles, or some metallurgic operation. (See Plate 34, Figs. 2 and 3.)

A singular species of amulet, apparently, was used by the Potomac tribes; see Plate 16, Fig. 6, which is drawn from a specimen in the National Institute.

Hollow bones of birds were employed for a species of baldric by the ancient Indians. They were of various lengths, reaching to three inches, and were bound around the body by a cord passing through them. (See Plate 33, Figures 3, 4, 5.) These articles were taken from the ossuaries at Beverly, in Canada.

In the same location were deposited what appear to have been walking-canes, having the twist of a vine about them, and domestic utensils of wood; all of which are, however, now completely mineralized. (See Plate 33, Figures 1 and 2; and Plate 19, Figures 1 and 2.)

In some of the low mounds of Florida were discovered the fragments of an utensil, the purpose of which appears to have been the preparation of some liquid, or drink, which required to be ceremonially poured out, without the possibility of the contents being spilled and lost. (See Plate 34, Figure 1.)

LOCAL MANITOES.—The superstitions of the existing race of Indians are evinced by their frequently selecting curiously wrought boulders of rock, called *Shin-ga-ba-wassins* by the Algonquins. These boulders have the essential character of idols. They mark the supposed locality of some god of the air. They are sometimes distinguished by the use of pigments. (See Plate 12, Figure 4, 5, 6, 7, 8.) They are generally imitative water-worn masses, upon which no chisel or labor of any kind has been employed, except by the addition of Indian pigments. Plate 74 is supposed to represent the Gitchy Kenabec, or Great Serpent, of their mythological and allegorical fictions.

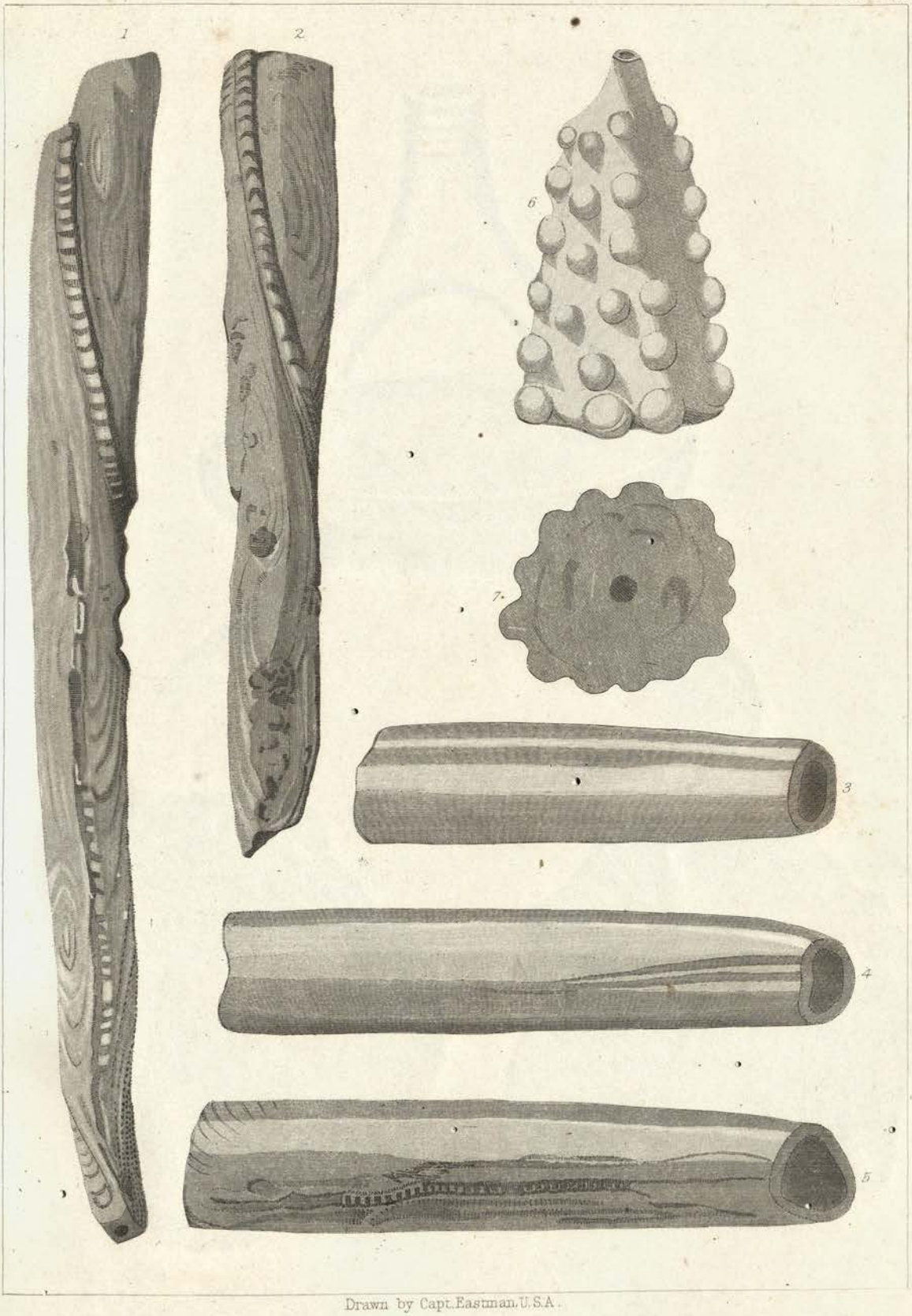
Figures 6 and 7, Plate 33, represent an antique implement of pottery, with a singular rugose mouth, of which it is not easy to form a definite opinion.

Figure 6, Plate 23, represents a curious antique, the use of which has puzzled conjecture, found in a tumulus in the Ohio Valley. It is formed from a very hard and compact species of slate-coal, and the material differs only, in this respect, from the common product of the Pittsburg coal-basin.

Figure 3, Plate 11, appears to have been a coal-chisel.

Figure 5, of the same plate, is manifestly a form of antique pipe.

In Figures 2 and 3, Plate 21, we behold two drawings, in two positions, of a large and well-made copper chisel, found in 1828 in a grave in the Straits of St. Mary's, which connect Lake Superior with Lake Huron. Its manufacture from the native copper, which is now being so extensively explored in the basin of the former lake, cannot be questioned.



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BALDRICES OF BONE AND ANTIQUE POTTERY

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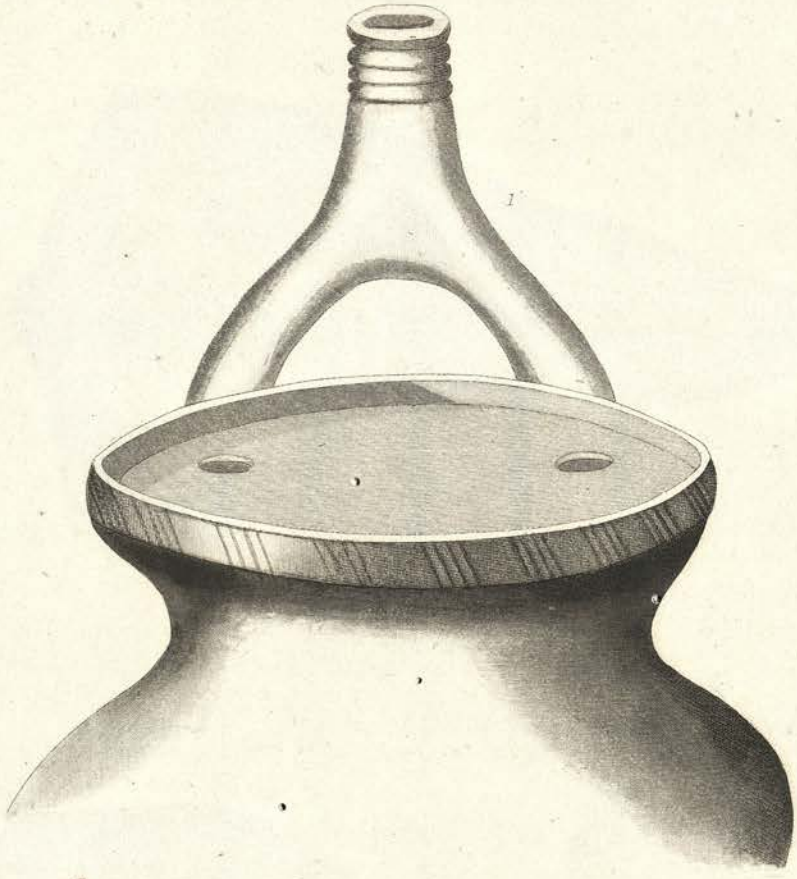

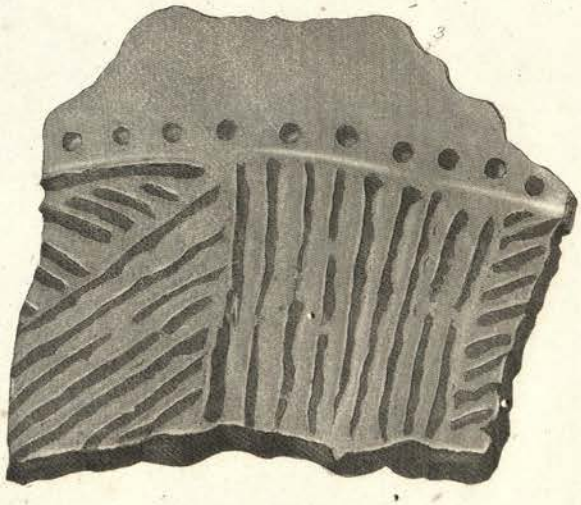

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FRAGMENTS OF ANTIQUE POTTERY.

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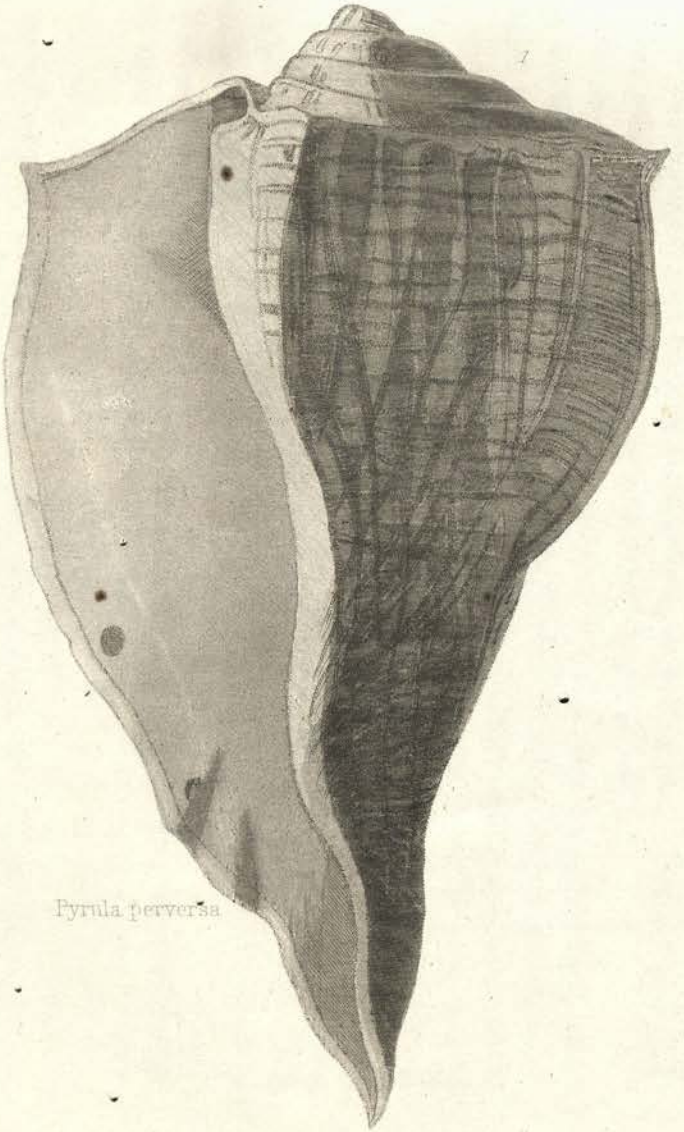


Pyrula perversa

Pyrula spirata

Drawn by Capt.S.Eastman.U.S.A.

F. ATTEMPTS IN MINING AND METALLURGY.

1. General Remarks.
2. Ancient Copper-Mining in the Basin of Lake Superior.
3. Vestiges of Ancient Mining in Indiana and Illinois.
4. Vestiges of Ancient Mining in Arkansas and Missouri.
5. Antique Mining in California.

1. A STATE of incipient society appears to have existed among the people who erected fortifications and mounds in the Mississippi Valley, which led them to search for the native metals lying on the surface of the country, and, in some instances, buried within its strata, or inclosed in veins. Such traces have been discovered, at intervals, over a very wide area. They extend from the mineral basin of Lake Superior in a south-western direction towards the Gulf of Mexico. The most striking traits of ancient labor exist in the copper districts of Michigan. There are some vestiges of this kind in the Wabash Valley. They appear also in Missouri and Arkansas, where, by the accumulation of soil, the works appear to be of a very ancient date; and, if we are not misinformed, such indications reappear even in California. Native copper and native gold seem to have been the two chief objects of search.

The state of art, denoted by this character of remains, does not appear to be raised beyond that which may be supposed to be required by the first and simple wants of a people emerging from the hunter state. There is no evidence that they understood, or undertook the reduction of earthy ores. Hammers, wedges, and levers, generally of a rude kind, appear to have been the mechanical powers employed to disintegrate the rock. These incipient arts will be best illustrated by the detailed notices.

Care is required in examining and applying archæological proofs of this nature, 1. That the state of the art be not overrated. 2. That a false era be not fixed on. 3. That a due discrimination be made in the objects of search, as whether they were metallic or saline.

It is important not to confound the earliest researches by the Spanish and French with those due, clearly, to the mound-builders.

2. ANCIENT COPPER MINING IN THE BASIN OF LAKE SUPERIOR.

The copper-bearing trap rock of Keweena Point, Lake Superior, runs, in a general course, west of south-west, crossing the Keweena lake, and afterwards passing about ten miles distant from the open shores of the main lake. This range crosses the

Ontonagon river about ten to twelve miles from the mouth. At this point, and chiefly on location Number 98 under the new grants, are found extensive remains of pits, trenches, and caves, wrought by the aborigines in ancient times, of which the present Indians know nothing.

These remains first appear on the Firesteel river, but in following the copper veins west to the Minnesota location, being Number 98 above named, they are more fully developed. There are three, and sometimes four, of these ancient "diggings" on veins which are parallel to each other, extending three or four miles. These veins are about nine hundred feet above the lake. They are very regular, pursuing a course of about north 70°, east, with a dip north, 20° west.

An observer, in September, 1849, speaks of these remains, which he had contemplated with great interest and curiosity, in the following manner:

"It is along the edges or out-crop of these veins that the ancients dug copper in great quantities, leaving, as external evidences of their industry, large trenches, now partly filled with rubbish, but well defined, with a breadth of ten to fifteen feet, and a variable depth of five to twenty feet. In one place the inclined roof, or upper wall work, is supported by a natural pillar, which was left standing, being wrought around, but no marks of tools are visible. In another place, east of the recent works, is a cave where they have wrought along the vein a few feet without taking away the top or outside vein stone. The rubbish has been cleared away in one spot to the depth of twenty feet, to the bottom of the trench, but the Agent is of opinion that deeper cuts than this will be hereafter found. When he first came to the conclusion, about eighteen months ago, that the pits and trenches visible on the range were artificial, he caused one of them to be cleaned out. He found, at about eighteen feet in depth, measuring along the inclined face or floor of the vein, a mass of native copper, supported on a cobwork of timber, principally the black oak of these mountains, but which the ancient miners had not been able to raise out of the pit.

The sticks on which it rested were not rotten, but very soft and brittle, having been covered for centuries by standing water, of which the pit was full at all times. They were from five to six inches in diameter, and had the marks of a narrow axe or hatchet about one and three quarter inches in width.

They had raised it two or three feet by means of wedges, and then abandoned it on account of its great weight, which was *eleven thousand five hundred and eighty-eight pounds*, (11,588,) or near six tons.

The upper surface had been pounded smooth by the '*stone hammers*' and mauls, of which thousands are scattered around the diggings. These are hard, tough, water-worn pebbles, weighing from five to fifteen pounds, or even twenty pounds, around which in the middle is a groove, as though a withe had been placed around it for a handle, and most of them are fractured and broken by use. Besides these mauls there has been found a copper wedge, such as miners call a 'gad,' which has been

much used. Under the mass of copper, and in almost all the works lately opened, there are heaps of coals and ashes, showing that fire had much to do with their operations.

With these apparently inadequate means they have cut away a very tough, compact rock, that almost defies the skill of modern miners, and the strength of powder, for many miles in a continuous line, and in many places in two, three, and four adjacent lines.

The great antiquity of these works is unequivocally proven by the size of timber now standing in the trenches. There must have been one generation of trees before the present since the mines were abandoned. How long they were wrought can only be conjectured by the slowness with which they must have advanced in such great excavations, with the use of such rude instruments.

The decayed trunks of full-grown trees lie in the trenches. I saw a pine over three feet in diameter, that grew in a sink-hole on one of the veins, which had died and fallen down many years since. Above the mass raised by Mr. Knapp there was a hemlock tree, the roots of which spread entirely over it, that had two hundred and ninety annual rings of growth. These facts throw the date of the operations now being unveiled back beyond the landing of Columbus, and consequently behind all modern operators of our race.

The skill which is shown, and the knowledge of the true situation of veins, as well as the patience and perseverance necessary to do so much work, all prove that it was the performance of a people more civilized than our aborigines.

It is reasonable to suppose that they were of the era of the mound builders of Ohio and the Western States, who had many copper utensils. This metal they must have obtained either here or at the South-west, towards Mexico; perhaps in both directions.

The successors to the Minnesota Company have sunk a shaft about forty feet on the vein above the great copper boulder; over to the west, and about one hundred and forty feet from it, another shaft near sixty feet in depth, and have connected them by an adit.

The average width of the vein is four feet, extending to eight feet in places. It has well-defined walls, and is filled with quartz, epidote, calcareous spar, and copper. The copper exists in strings, sheets, nests, and masses, sometimes across the vein, sometimes on one side, and sometimes on the other. The thickest sheet I saw was two and a half feet.

When we consider that the ancients, who went through the tedious process of beating and mauling away the rock here, found copper enough to compensate them for years, perhaps centuries, of labor, the richness of these mines, prosecuted with our means and knowledge, can scarcely be exaggerated. I should have mentioned a copper chisel, with a socket for a wooden handle, which has also been found, about five inches long and one and a quarter inch wide.

These discoveries throw all the old explorations of the French and English on Lake Superior into the back-ground. The Indians have no knowledge of the works I have been describing, although the second chief of the Fond du Lac band is understood to claim that his family have had the chieftainship more than seven hundred years; and he gives the names and ages of his ancestors back to that period. The people who wrought them must have cultivated the soil in order to sustain themselves. What did they cultivate? It is here, doubtless, that many of the silver ornaments found in the mounds of the South-west were obtained, for the copper contains scattered particles of that metal.

It is recorded that the Egyptians had the art of tempering copper so as to cut stone as well as wood, and that their great stone structures were wrought with tools of copper only. I have been told by a person who has seen the Egyptian stone-cutters' tools preserved in the British Museum at London, that there are some very much like those found here.

We have already copied from a Western paper an account of the remarkable discovery of a mass of pure copper, near the Ontonagon River, Lake Superior, in the course of explorations last spring. This mass has since been cut up into manageable pieces of three thousand to four thousand pounds each, and thus hauled to the Lake and shipped to this city, and two or three of them may now be seen in front of the store 239 Water-street. They are richly worth a short walk to any one not already familiar with the notabilities of the copper region.

This mass was found on the location of the Minnesota Company, of this city, in the process of exploring an old open cut or aboriginal digging, which was discovered by the appearance of a slight depression on the surface of the ground. In the bottom of this cut, covered by fifteen feet of earth in which were growing trees fully five hundred years old, lay this mass of pure copper, weighing eleven thousand five hundred and thirty-seven pounds, with every particle of rock hammered clean from it, supported by skids, and surrounded by traces of the use of fire either in the hope of melting it or to aid in freeing it from the rock. Near it were found several implements of copper, showing that the ancient miners possessed the arts of welding and of hardening copper —arts now unknown. It would seem that they failed in their attempts to break up this immense boulder, or to lift it out of the cut; but it may be that their efforts were suspended by reason of war, of pestilence, famine, or some other general calamity. This may have been thousands of years ago. The works of the old miners may be traced for two miles on this vein, and on other veins in the vicinity for a considerable distance. They evidently were ignorant of the use of iron, and worked very awkwardly.

The locality of these developments is the cluster of hills known as "The Three Brothers," two miles east of the Ontonagon, about twelve miles up that stream (twenty by water,) and some three hundred feet above the level of the Lake. There

are three large and rich veins here within a short distance of each other, at least one of them rich in silver. The vein which the Minnesota Company is now opening is about eight feet wide, though of unequal richness. The mineral is a native copper diffused through the rock. The Minnesota is working some thirty hands this winter, and preparing to prosecute its enterprise still more vigorously next spring."

The era of these ancient operations must have preceded the occupation of the country by the present families of the Ojibwas and Dacotahs; for the simple reason, that none of the various bands of these two generic nations preserve any traditions respecting them.

It is not necessarily to be inferred, that very great numbers of men were employed on the works, at the same time. It is more natural to suppose that the works are due to the labors of successive parties of miners, during a long epoch.

Neither does the working of the mines necessarily presuppose a high state of civilization. The mechanical powers of the wedge and lever were employed, precisely as we should suppose, *à priori*, they would be, among rude nations.

One of the most powerful means of operating on stones and ores among the aboriginal tribes, was fire and water. These were employed alternately, to disintegrate the hardest rocks. And it is apparent, that after removing the superincumbent soils, these were the most efficacious agents used here in pursuing veins.

In looking for the era when these works were in the most active state, we may suppose it to have been coincident with the time of the greatest amount of population in the Ohio and Mississippi Valleys. The mound-builders, and also the roving tribes of the West, had many uses for copper. It was, in fact, the copper age. They made a species of axes and chisels of it, for mechanical purposes. It was also extensively used for bracelets, for tinkling ornaments, such as are appended to the leather fringes of warriors' leggings and back dresses. It is a metal much esteemed by all the tribes, at the present day, and all our testimony is in favor of its being held in the same regard by the ancient tribes. We find it, along with sea-shells, bone beads, pendants, and other antique articles, in the largest tumuli of the West. It is one of the chief things found in our antiquarian works and mounds, over about eighteen degrees of latitude, which is the length of the Mississippi, and a longitudinal area, reaching from the Rocky Mountains to the sea-coast of New England.

It is apparent, that the ancient Red miners of Lake Superior supplied the demand, in its fullest extent. They probably received in exchange for it, the zea maize of the rich valleys of the Scioto and other parts of the West; the dried venison and jerked buffalo meat of the prairie tribes; and sea-shells of the open coasts of the Atlantic and Gulf. It is not improbable, indeed, when we examine the rocky character of much of the Lake Superior region, and the limited area of its alluvions and uplands, which appear ever to have been in cultivation, that parties of various tribes performed extensive journeys to this upper region, in the summer season, when relieved from

their hunts, to dig copper, that it was a neutral territory; and having supplied their villages, in the manner the Iowa and Minnesota Indians still do, in relation to the red Pipe-stone quarries of the Coteau des Prairies, returned with their trophies of mining.

No tribes, indeed, whose history we know or can guess, possessed civilized arts to sustain themselves in this latitude during the winter solstice. The shores of the lake yield neither wild rice, nor Indian corn. They did not anciently cultivate the potato. They depended upon game and fish, and it is only necessary to have passed a single winter in the lake latitudes, to determine that a large body of miners could not have been kept together a long time for such a purpose, without a stock of provisions. On the contrary, as the theatre of summer mining, in a neutral country, or by self-dependent bands, hundreds of years may have passed in this desultory species of mining.

3. Vestiges of Mining in Indiana and Illinois.

In the deep alluvial formation on the banks of Saline river, vessels of pottery, which appear to have been used in boiling saline water, have been raised from great depths. On visiting the site, in 1821,[1] there appeared, on examination of such facts as could be got, no doubt that these were to be regarded as evidences of their having been used in the evaporation of saline waters. That the native tribes did not make salt is well known; and this discovery of subterranean boilers of clay is presumptive evidence, one would think, that the work is due to Europeans, or some other civilized race. But if so, the country must have had the elements of a foreign population before the deposition of the Illinois alluvions of the lowest altitudes.

Indiana was visited by the French from Canada early in the seventeenth century. Vincennes was founded in 1710.[2] Several vestiges of attempts to mine, as well as other archæological data, appear in the Wabash Valley, of which we have been promised some account. It is important to preserve these notices, whatever value may be attached to their age. Personally, we are not disposed to assign a remote age to these labors: nor do they appear to denote a very high metallurgic knowledge, although that knowledge may be deemed of foreign origin.

Vestiges of Ancient Mining Operations in Arkansas and Missouri.

In descending the Unicau, or White River, from its sources in the Ozark hills of Arkansas and Missouri, in the early part of the winter of 1819, my attention was

[1] Vide Travels in the Central Portions of the Mississippi Valley.

[2] Law's Hist. Discourse.

arrested by several features of ancient occupancy; some of which denoted an attention to mining. These vestiges of occupancy, at an antique period, consisted of the remains of a town site; of bones, apparently calcined, and of pottery, which appeared to have been used in saline, or metallurgic operations. These remains, in the White River Valley, were all seated above the present site of Batesville. The Arkansas papers have since, during the building of the town of Little Rock, published an account of an ancient furnace discovered about A. D. 1838, under the soil, and of kettles of pottery.

A high antiquity has been claimed for these latter remains, without offering, however, any conclusive data, which have come to our notice, that they are not of an early Spanish or French era. The whole western banks of the Mississippi were ransacked early in the 16th century, under the delusive hope of finding gold and silver.

5. Evidence of Ancient Mining Operations in California.

It was late in the month of August, (the 19th,) 1849, that the gold diggers at one of the mountain diggings called Murphy's, were surprised, in examining a high barren district of mountain, to find the abandoned site of an antique mine. "It is evidently," says a writer, "the work of ancient times."[1] The shaft discovered is two hundred and ten feet deep. Its mouth is situated on a high mountain. It was several days before preparations could be completed to descend and explore it. The bones of a human skeleton were found at the bottom. There were also found an altar for worship and other evidences of ancient labor. Strong doubts are expressed whether the mine will bear the expenses of being re-opened.

No evidences have been discovered to denote the era of this ancient work. There has been nothing to determine whether it is to be regarded as the remains of the explorations of the first Spanish adventurers, or of a still earlier period. The occurrence of the remains of an altar, looks like the period of Indian worship. The facts should be properly examined, with a view to their historical bearing. Such examinations, if carefully conducted, may enlighten us in the nationality of the ancient people whose relics we here behold.

By another notice in the papers now submitted, it will be observed that remains of mining have been also recently discovered on Lake Superior, in addition to those before mentioned. Other parts of the country may afford similar evidences, and the facts from different latitudes deserve to be generalized. It is a duty we owe to archæology, to put on record every discovery of this kind. In no other manner can the knowledge of this branch of history be advanced. We have too long wandered in the mazes of conjecture. A complete archæological survey of the country should be executed.

[1] Private Corr.

G. OSSUARIES.

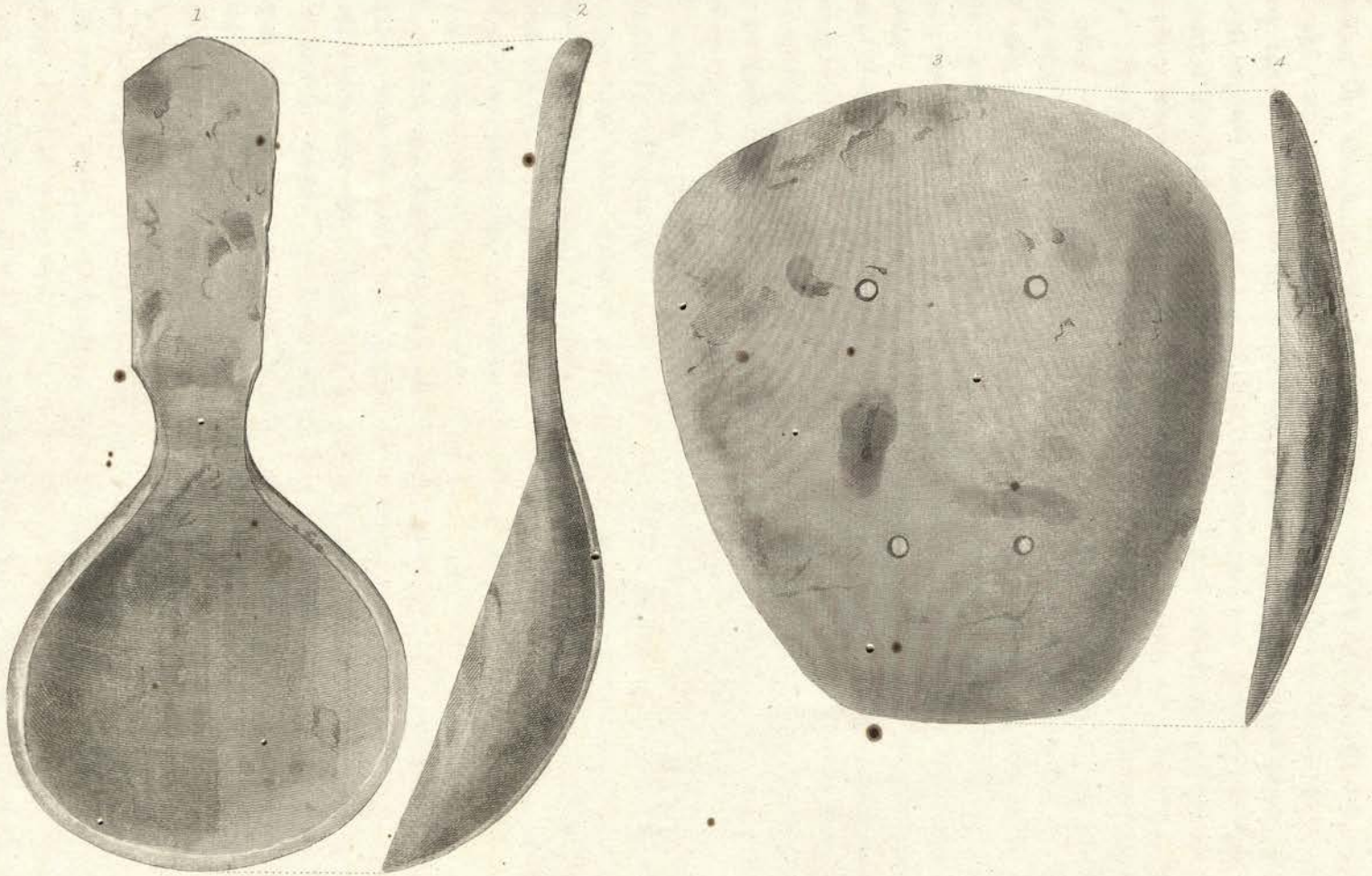
Some of the North American tribes had an ancient custom of wrapping their dead in bark and skins, and placing them in some elevated position above ground, till the flesh was decayed, and completely separated from the bones. This was often done by depositing the corpse in a tree; or if it were a village site, on a species of scaffold. In these situations, the bodies were protected from carnivorous animals. Tribes that lived in districts of country abounding in caves that might be closed, placed their corpses sometimes in these caves permanently. But several of the forest and lake tribes of ancient eras, where these advantages could not be secured, were found to place their dead in the positions indicated, above ground, till complete decomposition had supervened; when a general and final interment of the bones could be made.

There are traditions, that it was the duty of a certain class of men, called sometimes, "bone-pickers," to attend to this solemn and pious task; and that it was done periodically, at intervals of time fixed by them, or denoted by custom. The tribe was called upon, when an individual died, to unite in his obsequies. His bravery, wisdom, strength, or skill in war, hunting, or council, were then recited, and the lamentations publicly celebrated. The eulogy then pronounced was final, and not renewed at the general interment.

This is the origin of those ossuaries, or trenches of human bones, which have been occasionally found in clearing up and settling the forest. The localities of such bone trenches and vaults, were universally on elevated grounds, where water from the inundation of rivers, or any common source, could not overflow or inundate the bones. A custom of this kind may be supposed to intervene, in the history of nations, between that of burning the body,—which is still practised, we are told, among the Tacullies of British Oregon, or New Caledonia,[1]—and that of immediate interment, which is so generally practised. Such a custom could not be systematically continued, by a people who were not permanently established in a country, or who, at least, were subject to be driven away by the inroads of furious tribes. And it is known to have fallen into disuse by most, perhaps by all, the tribes east of the Rocky Mountains, since the discovery and settlement of the country.

One of these ancient ossuaries, which speaks of a bygone age, and probably an expatriated people, exists on an island of Lake Huron, called *Isle Ronde* by the French, and *Minnisäs* by the Algonquins. My attention was first called to it in 1833, on making a visit to it, and examining its antique places of sepulture. The village formerly existing on this island, appears to have been abandoned about seventy years

[1] Harman's Travels.



Capt. S. Eastman, U.S.A.

Illman & Sons

INDIAN SPOON AND GORGET.

ago, when the present fort of Michillimackinac was transferred from the main land at the apex of the peninsula of Michigan, to the island bearing this name. On approaching this site, and before reaching it, my attention was struck by a quantity of dry, and very white human bones, scattered on the shore. On landing, it was perceived that the action of the waves from the south-west against the pebbly diluvial plain, had exposed the end of one of these ancient ossuaries. There were bones from every part of the human body. They were traced to a trench or vault, on the level of the plain, where similar remains were observed to extend for several yards to a depth of three or four feet. In no instance were the bones of a complete skeleton found lying together, in their natural position. They were laid in promiscuously. The leg and thigh bones appeared to have been packed or corded, like wood.

The state of the bones denoted a remote antiquity. None but the smaller and vesicular parts appeared to have decayed. The trees were all of secondary growth, and the ground had the appearance of once having been cleared. I inquired of an aged Ottawa Indian, without receiving much light. He said they were probably of the era of the human bones found in the caves of the island of Michillimackinac.

Having satisfied my curiosity, I proceeded to the grave-yard, or ancient burial-place of the former village on the island—not a hundred yards distant. Here the interments had been made in the usual manner, each skeleton occupying a separate grave. I opened several to determine this fact, as well as to verify the era of the interments. In one grave there was found a gunlock, and a fire steel, both much oxydated, and other articles of European manufacture, denoting the palmy times of the fur trade.

Ten years after these examinations, I visited a very celebrated discovery of Indian ossuaries at Beverly, twelve miles from Dundas, in Canada West. This discovery had been made about 1837, and had produced much speculation in the local papers, and many visits from antiquaries and curiosity hunters. The site is an elevated beech-tree ridge, running from north to south. The trees appear to be of the usual age and mature growth, but standing at considerable distances apart. The ossuaries are formed invariably across this ridge, and consequently extend from east to west. I examined a deposit which measured eight feet by forty, and six feet deep. It was an entire mass of human crania, leg, thigh bones, &c., in the utmost confusion. All ages and sexes appeared to have been interred together. It appeared to have been laid bare, and dug over for the purpose of obtaining the pipes, shells, and other relics with which it abounded. Ten or eleven deposits of various sizes existed on the same ridge of land, but preserving the same direction. These were not, however, all equally disturbed by the spirit of finding relics, but this spirit had been carried to a very blamable extent, without eliciting, so far as I learned, any accurate or scientific description of these interments.

Among the articles obtained in the before-mentioned excavations, I insert drawings,

(Plate 35, Figures 1 and 2,) of the full size of two species of sea-shells, the *P. spirata* and *P. perversa;* four species of antique clay-pipes, (Figures 5 and 6, Plate 8, and Figures 1 and 3, Plate 9); a worked gorget (Figure 3, Plate 19) of sea-shell, of which the original nacre of red is not entirely gone; five specimens of curious opaque-colored enamel beads, (Figures 7, 8, 9, 10, and 11, Plate 24); three baldrics of bone, (Figures 14, 15, and 16, Plate 24); four of opaque glass twisted, (Figures 12, 13, 14, and 20, Plate 25); eight different sized shell beads, (Figures 17, 18, 19, 20, 21, 22, 23, and 24, Plate 24,) and eight amulets of red pipe-stone, (Figures 1, 2, 3, 4, 5, 6, 9, and 11, Plate 25); three of shell or bone, (Figures 7, 23, and 25, Plate 25); three of bears' teeth, (Figures 26, 27, and 28, Plate 25.)

Figures 8, 10, 15, 16, 17, 18, 19, 21, 22, and 24, Plate 25, are minor specimens of glass or enamel.

Figures 25 and 26, Plate 24, are human teeth, used as ornaments.

There is abundant evidence that the practice of forming public ossuaries had been continued after the arrival of the French in 1608. The shells are such as must have been derived from traffic with the southern or western Indians. The pipes are of an antique and peculiar pattern, and were employed without stems: in this respect they correspond with the antique pipe from an ancient grave at Thunder Bay, Michigan, and also, it is thought, with certain pipes mentioned by Professor Dewy as found at Fort Hill, Genesee Co., N. Y.[1] The shell beads are of the same kind, precisely, as those which were discovered in the Grave Creek Mound, Virginia, as described in the first volume of the Transactions of the American Ethnological Society.[2] By the decay of the surface of the shell, which constituted their inner substance, they appear to be of the same age.

The amulets of red pipe-stone consist of bored square tubes, of the peculiar sedimentary red rock existing at the Coteau des Prairie, in the territory of Minnesota; and are identical, in material, with the cuneiform pieces of this mineral, which were dug at the foot of the flag-staff of old Fort Oswego, N. Y.[3]

The colored enamel beads are a curious article. No manufacture of *this* kind is now known. They are believed to be of European origin, and agree completely with the beads found in 1817, in antique Indian graves, at Hamburg, Erie Co., N. Y.[4]

The ancient Indians, before the introduction of European manufactures, formed baldrics for the body from the hollow bones of the swan and other large birds, or deers' bones, in links of two or three inches long. These were strung on a belt or string of sinews or leather. It is believed that the relics figured are of this kind.

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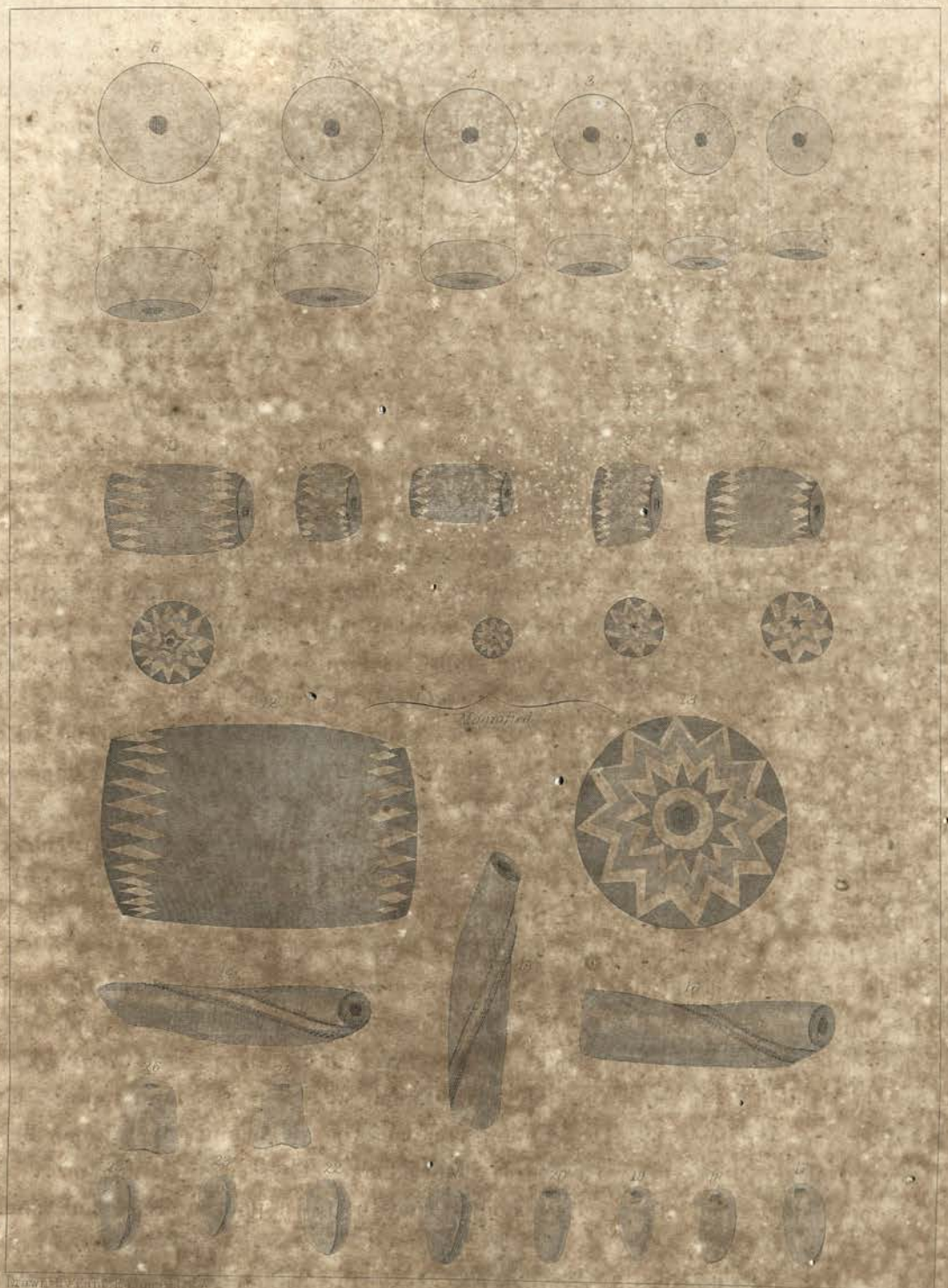
[1] Notes on the Iroquois, p. 205, 2d Edition. E. Pease & Co., Albany, 1847.

[2] New York, Bartlett & Welford, 1835.

[3] Notes on the Iroquois, p. 237, 2d Edition. E. Pease & Co., Albany, 1847.

[4] Second Part of Lead Mines of Missouri. N. Y. 1819.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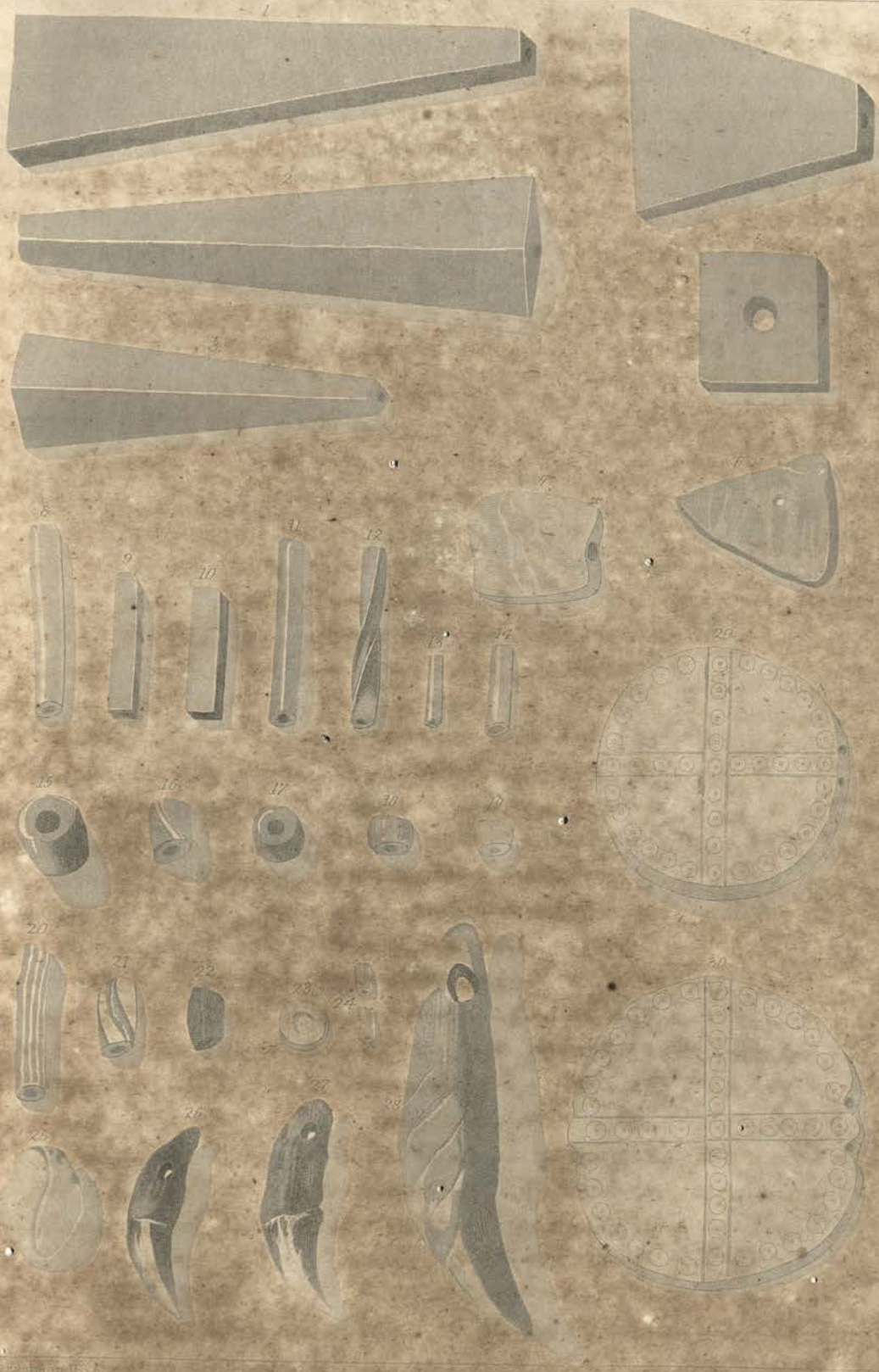
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There were also found copper bracelets, analogous, in every respect, to those disclosed by the mounds and graves of the West. These relics denote a period of wide exchange, and great unity of manners and customs, among the ancient Indians. They link in unison the tribes of Canada, Western New York, the Mississippi Valley, and the Great Lakes. They indicate no art or degree of civilization superior to that possessed by the present race of Indians. They give no countenance to the existence, in these regions of a state of high civilization.

H. ARCHÆOLOGICAL EVIDENCES THAT THE CONTINENT HAD BEEN VISITED BY PEOPLE HAVING LETTERS, PRIOR TO THE ERA OF COLUMBUS.

1. Ancient Inscription on the Assonet, or, so called, Dighton Rock.
2. Antique Inscription found in one of the Western Tumuli.
3. Devices on a Globular Stone of the Mound Period, found in the Ohio Valley.
4. Tradition of an Ancient Shipwreck.
5. Skeleton in Armor.

THAT America was visited early in the tenth century by the adventurous Northmen from Greenland, and that its geography and people continued to be known to them so late as the twelfth century, is admitted by all who have examined, with attention, the various documents which have been published, during the last twelve years, by the Royal Society of Northern Antiquaries at Copenhagen. There are evidences which every candid and right-minded historian will admit, that the hardy and bold mariners of Scandinavia, of that period, crossed freely, in vessels of small tonnage, the various channels, gulfs, and seas of the Northern Atlantic, and were familiar with the general islands and coasts stretching from Iceland to the northern parts of the continent. They visited from Greenland, not only the adjacent coasts of what are now called Newfoundland and Nova Scotia, but held their way to more southerly latitudes, which they denominated Vinland,— a term that is, by an interpretation of the sea journals and nautical and astronomical observations of those times, shown, with much probability, to have comprised the present area of Massachusetts and Rhode Island. They appear to have made attempts to plant a colony in this area.

Finding the trending of this land to favor the spirit of adventure, they ran down to more southerly latitudes; reaching, it is thought, to near the present site of St. Augustine, in Florida; the bays of New York, Delaware, and Chesapeake, not appearing, however, to have attracted notice. It is certain that their primitive maps of this part of the coast, as published at Copenhagen, bear a name that is translated Great Ireland.

Thus much, the learned of the present day admit. There is no pretence that the Scandinavians considered it a new continent, or that they verified any geographical theory, by their bold voyages. But these feats had attracted attention at home, and the fame of them reached other parts of Europe; for it is known that Columbus himself had been attracted by them, and visited Iceland for the purpose of verifying what he had heard, and increasing the sum of facts on which his great theory was based.

The leading evidences serve to attest that Vinland was the present very marked seaboard area of New England. The nautical facts have been carefully examined by Professors Rafn and Magnusen, and the historical data adapted to the configuration of coast which has Cape Cod as its distinguishing trait. All this seems to have been done with surprising accuracy, and is illustrated by the present high state of the arts in Denmark and Germany.

The principal error in the minutiæ, from which historical testimony is drawn, appears to be in the interpretation of a descriptive monument, found in the area of the colony which was attempted to be formed at the head of Narragansett Bay, within the chartered limits of Massachusetts. It will serve, probably, to strengthen the claim to discovery, by distinguishing, and so abstracting from the consideration of this inscription, so much of it as appears to be due to the Indians, and is, manifestly, done in their rude pictographic characters; and leaving what is clearly Icelandic to stand by itself. This has been done in the following paper, which embraces the results of a study by an Algonquin chief in 1839, of the inscription of Drs. Baylies and Goodwin, as published at Copenhagen. Chingwauk, the person alluded to, having rejected, in his interpretation, every character but three, of the number of those which have been generally supposed to be northern, or in old Saxon; and these not being essential to the chief's interpretation, but closely involved with others important to the Scandinavian portion; I have restored them to that compartment of the rock. Two distinct and separate inscriptions thus appear, of which it is evident that the Icelandic is the most ancient. The central space which it occupies could not have been left, if the face of the rock had been previously occupied by the Indian or pictographic part.

That the native Algonquins recorded, on the same rock, and at the same era, the defeat of the Northmen, as acknowledged by the latter, by the use of the balista described, is hardly probable, yet possible. The inscription was more likely, as is shown by Chingwauk, a triumph of native against native; yet it is remarkable, that a balista is among the native figures employed. But the circumstance most conclusive is the want of European symbols in the right hand side of the inscription relative to the defeated enemy. Could it be shown, by archæological evidence, that swords, nats, &c., in this part of the drawing, were used by the invaders, or that hats were unknown to Northmen of the tenth century, the objection would be obviated. The ceremonial observances of the sachem-priest, MONG, and the attack led by the chief, Pizh-u, or Panther, are not inconsistent with Indian theories of mystical influences, on White or Red men, known to their religion, mythology, and peculiar *Manito* worship.

The second paper is founded on the determination of M. Jomard, of Paris, of Libyan characters upon one of the tumuli of Western Virginia. To others these characters have appeared to be Celtiberic. This is the opinion expressed by Professor Rafn, of

Copenhagen, in the Memoirs of the Northern Antiquarian Society. This opinion was concurred in by the American Ethnological Society.[1] The imperfection, however, of the several copies of the inscription heretofore examined, furnishes the occasion of presenting a perfect copy, taken from the original stone in 1850.

Traditions of the other hemisphere, which have been variously urged upon our notice, render it desirable to scrutinize our antiquities very closely for evidences of early voyages, and we should not be surprised at finding even a Grecian and Persic element of an early intrusive population. The increased knowledge of, and attention given to, the laws and theories of winds, currents, and temperature,—which must have, in early ages as now, much affected the material intercommunication of nations navigating the shores, and visiting the islands of the Indian, Pacific, and Polynesian seas,—commend that class of facts very strongly to the attention of American ethnologists. Trade-winds, monsoons, oceanic streams, like that of the Mexican Gulf, and other forms of the laws of motion generated by mere *temperature,* (for both wind and water obey it,) have had, apparently, a greater agency in settling the globe than has been awarded to them. If nations stumbled upon both the Atlantic and Pacific shores by accident, the *student of races* should not wonder. We applaud Columbus because he *meant* to make a discovery. But the veriest tyro must admit that he too stumbled upon America in looking for India and China.

1. Ancient Inscription on the Assonet, or Dighton Rock.

More importance has been attached to the Dighton Rock inscription, perhaps, than its value in our local antiquities merits. This may, it is believed, be ascribed in part to the historical appeal made to it, a few years ago, by the Royal Society of Northern Antiquarians, at Copenhagen, on the occasion of their publishing the collection of *old* Icelandic sagas, relating to early discoveries in America. It is certain that it was not regarded in any other light than the work of Indian hands before that era. There is something pleasing to the human mind in ingenious researches, the results of which unravel, or merely purport to unravel, mystery in any department of knowledge. The interest once felt in the zodiacal stone of Denderach turned upon this principle, although its importance to chronology has long since entirely vanished. It was the same intense ardor to pry into the unknown, which gave edge to the early discoveries of Young, Champollion, and Rossilini in the hieroglyphic system of ancient Egypt. That the celebrated stone of Rosetta did not yield an equally barren harvest with that of Denderach, in the field of antiquarian letters, may be attributed to the discovery

[1] Vol. I. Transactions.

of its trilingual character, of which the Greek copy was happily conjectured to be an equivalent of the ancient Coptic.

We have, in our own country, had our interest excited, within a few years, by the inscribed stone of Manlins, giving us the date of 1520 as the period of the first ingress of European footsteps into the Iroquois territory. A different, but still an historic interest arose from the Palladic or Oneota stone, to which the native tradition refers as the monumental evidence of the national origin of the Oneida tribe; and, latterly, our local antiquities have assumed a still more complicated form by the unexplained intrusion of an apparently Celtiberic inscription in one of our larger western tumuli. As the Mississippi Valley has been settled, false religion, basing itself upon the gross impositions of the Mormon prophet, Smith, has led to apocryphal discoveries of various metallic plates, and, in one instance, of metallic bells, bearing inscriptions which have been attempted to be imposed upon the populace as veritable antiquities: but these pretended discoveries have been so bunglingly done as not for a moment to deceive the learned, or even the intelligent portion of the community. It has been easy, at all times, to distinguish the true from false objects of archæology, but there is no object of admitted antiquity, purporting to bear antique testimony from an unknown period, which has elicited the same amount of historical interest, foreign and domestic, as the apparently mixed, and, to some extent, unread inscription of the Dighton Rock.

As Americans, we are peculiarly susceptible to this species of newly awakened interest. It is but the other day, as it were, that we began to look around the northern parts of the continent for objects of antiquarian interest. Every thing in our own history and institutions is so new and so well known that there has been scarcely a subject to hang a doubt upon, and it appears refreshing to light on any class of facts which promises to lend a ray of *antiquity* to our history. The Indian race is, indeed, the oldest thing in American antiquity, and they bid fair to take the place of the inscribed shaft and undeciphered medal of the old world. It is on this account that so long-sustained an interest has been maintained respecting the various tumuli and remains of the rude fortifications of the West, of which we must yet observe, with due respect to the descriptive labors of our predecessors, that the speculations growing out of them have added incomparably more to the stores of vague hypothesis than of sound philosophy.

The very nascence of our historic and antiquarian literature tends to create a distrust of its excellence, and we are prone to grasp at suggestions from the other side of the Atlantic, on the remains of ancient art here, as if they were inevitable results of the most pains-taking personal and critical examinations on the spot, when, in fact, they are sometimes thrown out as a mere alternative of puzzled thought or editorial ingenuity.

A very different spirit and mode of investigation is shown in the several papers of the Antiquitates Americana—a work devoted to the early history of the ante-Columbian epoch. Before the publication of this work, this epoch was nearly an historical blank; and it has taught inquirers how to bring the arts properly forward, to illustrate obscure points of history.

Having devoted attention to the Indian mode of communicating ideas by pictography, during several years residence on the frontiers, it will, it is believed, further the object which the Copenhagen Society had in view, by separating the pictographic part of the figures, represented on the Dighton Rock, from the confessedly Icelandic portion, and exhibiting them in separate drawings. This it is proposed to do, in the sequel of the present paper.

The materials I had collected in the West, and the study I had bestowed upon them, would have enabled me to take this question up, on my return from the frontiers in 1841; but I should not, perhaps, have done so, had not the New York Historical Society, in 1846, placed me on a committee for that purpose.

This trust I executed in the month of August, 1847, taking an evening boat at the city of New York, and reaching the thriving town of Fall River or Troy, near the mouth of the Taunton or Assonet River in Massachusetts, early the next morning. This latter point is some ten miles, by the nearest route, from Dighton Four Corners in Rhode Island, directly opposite to which, on the Massachusetts side of the river, the rock lies. This distance was passed in an open one-horse buggy, which afforded a pleasant view of the state of New England cultivation and thrift, on a rather indifferent soil, resting on conglomerate and trap rocks, which support a heavy boulder and block-drift stratum. Most of the larger blocks in this part of the country do not appear to have been carried long distances from their parent beds, as they are not only of unusual dimensions, but without very striking evidences of attrition. This block and boulder drift extends to the Massachusetts shore, and beyond the inscription rock, which latter is a large angular block of greenstone trap, presenting a smooth inclined line of structure or natural face towards the channel. It lies on a large flat in a bend of the river, which is quite exposed and bare at ebb tide, but covered with several feet of water at the flow, submerging the rock, with its inscriptions. This diurnal action of the tide must have, in the course of years, tended to obliterate the traces of all pigments and stains, such as the natives are generally accustomed to employ to eke out their rock-writings, or drawings. The effects of disintegration, from atmospheric causes, have probably been less, under this tidal action, than is usual in dry situations, but the tide deposits upon its surface a light marine scum, which must render any scientific examination of the inscription unsatisfactory, without a thorough removal of all recremental or deposited matter. There are other, but far lesser-sized boulders and blocks lying on this flat, one of which, near to it, has evidently some artificial marks upon it, but being, at the time of my visit, just under water, and much

coated with a fine alluvial scum, its character could not be exactly traced. Similar blocks, and ovate boulders of greenstone and other formations, also lie thickly scattered on the main land, on each side of the river. One of the boulders of an angular character, on the Massachusetts shore was judged to be twenty times the dimensions of the inscription block. This feature of the geology assumed a most interesting character, but I had not, in a brief visit, assigned myself time to pursue it.

I crossed the river to the rock in a skiff rowed by an interesting lad, called Whitmarsh, who was not the less so for a lisp. He had been across the river to the rock at an earlier hour the same morning, and had pleased his fancy by drawing chalk lines on some of the principal figures, which made them very conspicuous as we approached the rock, particularly the quadruped at the lower part of the inscription, (No. 12, Plate 36); which he had represented as a deer,—the long upright lines on the rock, just above its head, being taken by him for horns; and he told me very unpretendingly, that this figure was originally meant for a deer. The morning tide, which was coming in, had reached the feet of this figure, but had not yet covered them, when I landed on the rock. The two human figures without arms, (Nos. 26 and 27,) at the right of the inscription, (as the observer faces it,) the large figure having the usual hour-glass shaped body, and on the left (No. 1) of the published interpretation hereafter mentioned, and the chief deep lines and curves in the main devices, between these figures, in which the several copies of 1790 and 1830 coincide, were plainly traceable. The lines drawn in Mr. Goodwin's plate, on the extreme left of the frontlet-crowned figure No. 1, I could not, with any incidence of the light I could command, make out or identify, which was probably owing to tidal deposits. The first impression was one of disappointment. As an archæological monument, it appeared to have been over-rated. A discrepancy was observed, in several minor characters between the copies of Baylies and Goodwin of 1790, and that of the Rhode Island Historical Society of 1830; but few devices were wanting in its essential outlines. The most important, in the part which is not pictographic, consists in the lower portion of the central inscription, which has been generally supposed, and with much reason, to have an alphabetical value. The letters which appear in the Rhode Island Historical Society's copy, as published at Copenhagen, are either imprecise or wholly wanting; but there is something in the inscriptive figures upon which to found the interpretations which will be mentioned in the sequel. It was a clear, bright day, and I varied my position, by movements of the skiff, in front of the rock, to get the best incidences of light. It was evident, under all the difficulties of tidal deposit and obscure figures, that there were two diverse and wholly distinct characters employed, namely, an Algonquin and an Icelandic inscription.

But before I proceed to state the deductions which are, in my judgment, to be drawn

from it, I will introduce an interpretation of the pictographic part of this fruitful puzzle of antiquarian learning, which was made by a well-known Indian priest or Meda, at Michillimackinac, in 1839. Chingwauk, the person alluded to, who is still living, is an Algonquin, who is well versed in the *Ke-keé-win*, or pictographic method of communicating ideas of his countrymen. He is the principal chief on the British side of the river at Sault Ste. Marie. He embraced Christianity during some part of the period of my residence on that frontier, prior to the time of this interpretation. He had previously been one of the most noted professors of the Indian *Me-da-win*, which is the name of the professors of the ancient Aboriginal religion. He is also a member of the Wabeno Society, which is supposed to be a modern or new phasis of it. He is well versed in the various kind of the pictographic figures, by which ideas are communicated. He is quite intelligent in the history and traditions of the northern Indians, and particularly so of his own tribe. Naturally a man of a strong and sound, but uncultivated mind, he possesses powers of reflection beyond most of his people. He has also a good memory, and may be considered a learned man, in a tribe where learning is the result of memory, in retaining the accumulated stores of forest arts and forest lore, as derived from oral sources. He was one of the war-chiefs of his tribe, in the perilous era of 1812. He speaks his own language fluently, and is still regarded as one of the best orators of his tribe. Attention was perfectly arrested by the force, comprehensiveness, and striking oratorical turns, of a speech which he delivered, in full council, before the government commissioners at Michillimackinac, in 1836. He had, on another occasion many years before, shown the considerate temper of his mind, by dropping the uplifted tomahawk, which had been raised under a hostile chief, called SAS-SA-BA, to arrest an American exploring expedition, on their entrance, in 1820, into the, until then, sealed waters of Lake Superior.

When I first went to reside in the Indian country, in 1822, in an official capacity, I observed this man to be expert in drawing the Indian signs and figures; I saw in his hands tabular pieces of carved wood, called *music-boards*, on which were curiously carved and brightly painted, in the lines of sculpture, the figures of men, birds, quadrupeds, and a variety of mixed and fabulous mythological devices, which were said to be the notations of songs.

Such was the man whom I employed and paid, to be my teacher in unravelling these devices, and to instruct me in the several modes of employing their pictographic art. Seventeen years had now elapsed, from the time my attention was first called to this subject, when the Royal Society of Antiquarians, at Copenhagen, embraced, in their publication,—the Antiquitates Americana,—a full series of the several copies of the inscription on the Dighton Rock. I immediately thought of my Indian instructor, and having taken the volume to Michillimackinac, I despatched an invitation to him at St. Mary's, to visit me during the summer season. I did not deem it prudent to run the risk of awakening suspicion, by stating the object of the requested visit. The

chief complied with my wishes, bringing with him four companions to manage his canoe.

He said that he had come in consequence of my verbal message, and inquired what had induced me to send for him.

I laid before him the volume, opening it at Plate 12. "You will recollect," I said, "that many years ago you gave me instructions in the *Ke-keé-win* of your nation, as applied to the MEDAIWIN and the WABENO societies. I know you to be well versed in this art, and have therefore sent for you to explain this ancient inscription, which has puzzled men of learning. You have since this time, I know, united yourself to a Christian church, and may think such knowledge no longer worthy of attention; but it is, nevertheless, a rational curiosity. The figures and devices here shown, have been copied from the face of a rock lying on the sea-coast of New England. They were noticed at the time that the English first landed and settled there; (1620.) They are believed to be very old. Both the inscriptions on this plate (No. 12) are copies of the same thing, only one of them was taken forty years before the other. The last was taken nine years ago. It is supposed, as the sea rises on the rock twice a day, that some of the minor figures may have been obliterated. You will perceive, by studying them, in what particulars the two copies differ. Was the inscription made by Indians, or by others? What is your opinion?"

This was the substance of my remarks. No other facts or opinions were revealed. After scrutinizing the two engravings for some time, with his friends, he replied: "It is Indian; it appears to me and my friend, to be a *Muz-zin-na-bik*, (i. e., rock writing.) It relates to two nations. It resembles the *Ke-ke-no-win-un*, or prophetic devices of an ancient class of seers, who worshipped the snake and panther, and affected to live underground. But it is not exactly the same. I will study it." He then requested permission to take the volume to his lodge, and asked for a candle, that he and his companions might study it during the evening.

The next day he came at the appointed time, with two of his companions, bringing the book. His principal aid in this investigation, was a hunter, called by the name of *Zha-ba-ties*. I had prepared for this interview, by having present the late Henry Conner, Esq., the most approved interpreter of the department, in addition to two members of my family; all well versed in the Chippewa and English languages. I had numbered each figure of the inscription, in order to give precision to the chief's interpretation.

Chingwauk began by saying that the ancient Indians made a great merit of fasting. They fasted sometimes six or seven days, till both their bodies and minds became free and light; which prepared them to dream. The object of the ancient seers, was to dream of the sun; as it was believed that such a dream would enable them to see everything on the earth. And by fasting long and thinking much on the subject, they generally succeeded. Fasts and dreams were first attempted at an early age

What a young man sees and experiences during these dreams and fasts, is adopted by him as truth, and it becomes a principle to regulate his future life. He relies for success on these revelations. If he has been much favored in his fasts, and the people believe that he has the art of looking into futurity, the path is open to the highest honors.

The prophet, he continued, begins to try his power in secret, with only one assistant, whose testimony is necessary should he succeed. As he goes on, he puts down the figures of his dreams or revelations, by symbols, on bark or other material, till a whole winter is sometimes passed in pursuing the subject, and he thus has a record of his principal revelations. If what he predicts is verified, the assistant mentions it, and the record is then appealed to as proof of his prophetic power and skill. Time increases his fame. His *ke-keé-wins*, or records, are finally shown to the old people, who meet together and consult upon them, for the whole nation believe in these revelations. They, in the end, give their approval, and declare that he is gifted as a prophet — is inspired with wisdom, and is fit to lead the opinions of the nation.

Such, he concluded, was the ancient custom, and the celebrated old war-captains rose to their power in this manner. I think the inscription in this volume is one of these ancient *muzzinabiks*. It is old—it was probably done by the ancient *Wa-be-na-kies* or New England Indians. Before the white men came, there were great wars among the Indians.

He said that he had selected the drawing of 1790. Part of the figures appeared to have been worn off, and were illegible. It consisted of two parts. If a line were drawn across a certain part of the inscription, which he placed his finger on, it would not touch any part of the figures. All the figures to the left of such a line would be found to relate to the acts and exploits of the chief represented by the key figure, Number 1, and all the devices to the right of it had reference to his enemies and their acts.

I drew a line, in pencil, from A to B (See Plate 36) which completely verified this discriminating observation. I also drew a line to the left of the key figure, from C to D. I had prepared to give exactitude to my numbering of the figures or devices by embracing every thing of sufficient value to stand by itself as a symbol or representative character.

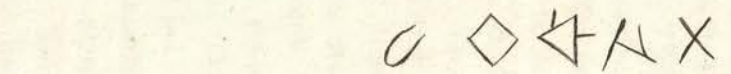
The inscription, he said, related to two nations. Both were *Un-ish-in-á-ba*, or the Indian people. There was nothing depicted on either of the figures to denote a foreigner. There was no figure of, or sign for, a gun, sword, axe, or other implement, such as were brought by white men from beyond the sea. There were some things, however, which he would mention when he came to them, which did not belong to the *ke-keé-win*.

Number 1, Plate 36, he said, represents an ancient prophet and war-captain. He records his exploits and prophetic arts. The lines or plumes from his head denote his power and character.

The parts in dots are not in the Rhode Island place

Taken in 1790.

Fig. E.



The characters represented by Fig. E were found in 1837 by H.R. Schoolcraft, Esq. in place of those seen at Fig. 24.

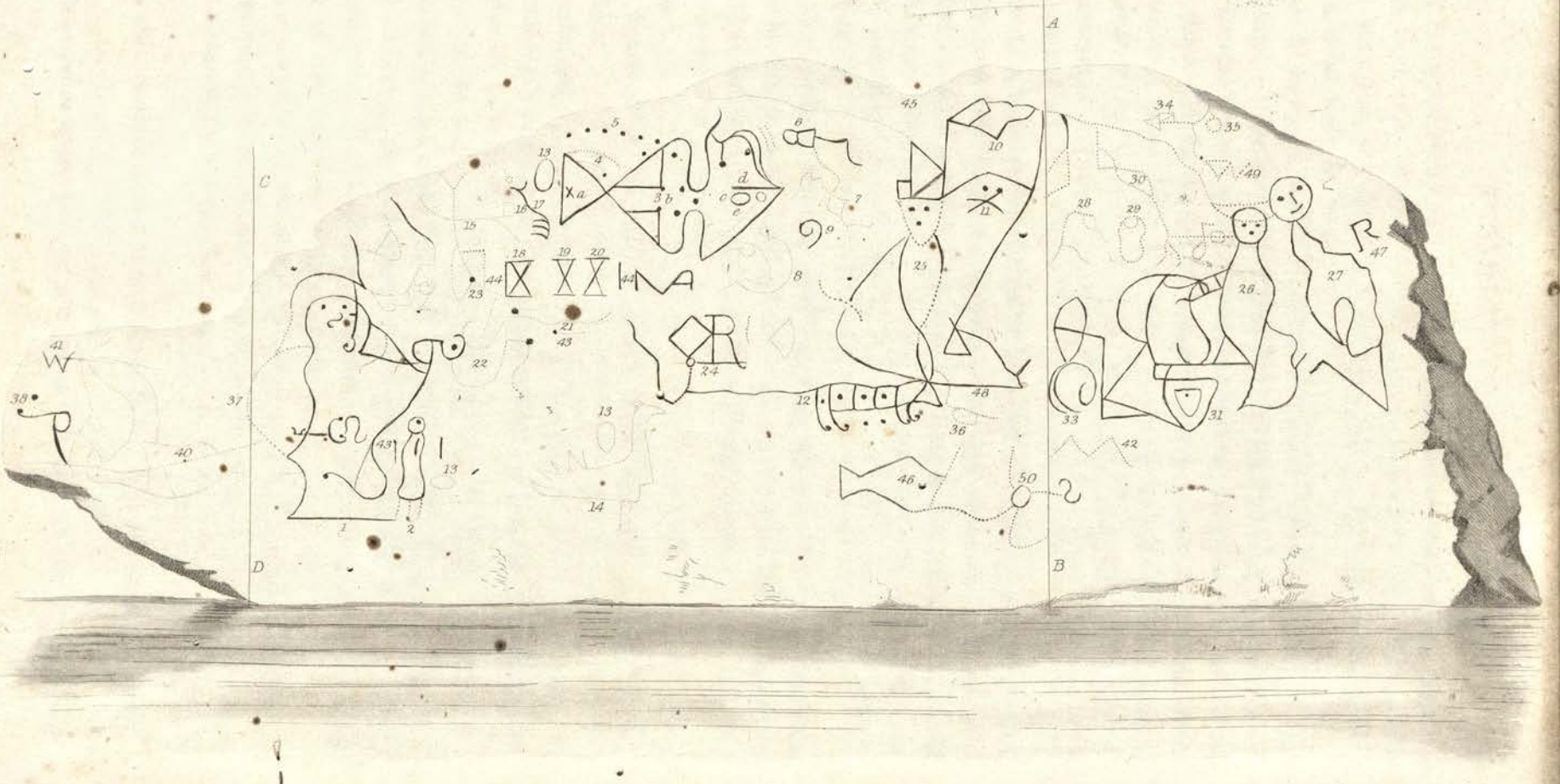


Figure Number 2, represents his sister. She has been his assistant and confidant in some of his prophetical arts. She is also the *Ag-oon-au-kway*, or Boon of Success in the contemplated enterprise, and she is held out, as a gift, to the first man who shall strike, or touch a dead body in battle.

Figure Number 3 depicts a structure called *Wah-gun-ak-o-beed-je-gun.* It is the prophet or seer's lodge. It has several divisions, appropriated to separate uses, marked *a*, *b*, *c*. Part *a* denotes the vapor-bath, or secret sweating lodge, marked by crossed war-clubs. The three dots, in the centre of apartment *b*, denote three large stones used for heating water to make steam, and are supposed to be endowed with magical virtues. *c* represents the sacred apartment from which oracular responses are uttered. It contains a consecrated war-club, of ancient make, marked *d*, and a consecrated pole, or balista, marked *e*.

Figure 4 represents a ponderous war-club, consecrated for battle. Such war-clubs, of which figure 35, and *e* of No. 3, furnish other examples, were anciently made by sewing up a round stone in a green skin, and attaching a long pole to it. After drying, the skin assumed great hardness, and the instrument, which performed some of the offices of a battering-ram, was one of the most effective weapons of attack. (See Figure 2, Plate 15.)

Figure 5. The semi-circle of six dots signify so many moons. The first were continuous, the others broken or interrupted. They mark the time he devoted to perfect himself for the exploit, or actually consumed in its accomplishment.

Figure 6 is the symbol of a warrior's heart.

Figure 7. A dart.

Figure 8. The figure of an anomalous animal, which probably appeared in his fasts to befriend him.

Figure 9. Unexplained.

Figure 10. Accidentally omitted in the interrogatories. It is the usual figure for a human trunk, drawn transversely.

Figure 11 represents the number 40. The dot above denotes skulls.

Figure 12. This is a symbol of the principal war-chief of the expedition against the enemy. He led the attack. He bears the totemic device of the Pizhoo, which is the name of the northern lynx. (L. Canadensis.) The same word, with a prefix denoting great, is the name of the American cougar, or panther.

Figure 13. This is a symbol of the sun. It is repeated three times on the inscription; once for the prophet's lodge, number 3, again for the prophet's sister, number 2, and, in the present instance, for the prophet himself. It is his totem, or the heraldic device of his clan.

Figure 14 represents a sea-bird called MONG, or the loon. It preserves the prophet's name.

Figure 15. A *Pim-me-dau-ko-nau-gun,* or war camp. It denotes the place of ren-

dezvous, where the war dance was celebrated before battle, and also the spot of reassembly on their triumphant return.

Figure 16. A *Sah-sáh-je-wid-je-gun*, literally, instrument of the war-cry, which is an ensign, or skin flag, usually borne by a leading man.

Figure 17. An instrument used in war ceremonies in honor of a victory, as in ceremoniously raising the flag, and placing it in rest after victory, to be left as a memento.

Figures 18, 19, 20, represent dead bodies. They are the number of men lost in the attack.

Figure 21. A pipe of ancient construction, ornamented with feathers.

Figure 22. A stone of prophecy. It is sometimes employed to determine the course a war party should pursue.

Figure 23. Unexplained.

Figure 24 has no apparent signification, as a pictographic symbol.

Figure 25. A wooden idol, set up in the direction of the enemy's country, and within sight of the prophet's lodge.

Section of the inscription to the right of the line A. B.

This group of devices the chief determined to have relation, exclusively or chiefly, to warlike and prophetical incidents on the part of the enemy.

Figures 26, 27. Two prominent human figures, representing the enemy. They are drawn without arms, to depict their fear and cowardice on the onset. They were paralyzed by the shock, and acted like men without hands.

Figures 28, 29. Decapitated men, probably chiefs or leaders.

Figure 30. A belt of peace, denoting a negotiation or treaty. Such belts were preserved with great care.

Figure 31. The enemy's prophet's lodge.

Figure 32. A bow bent, and pointed against the tribe of Mong. This is a symbol of preparation for war, and denotes, in this relation, proud boasting.

Figure 33. Symbol of doubt, or want of confidence in the enemy's prophet.

Figure 34. A lance pointing to the enemy. This is a symbol of boasting and preparation, and tallies exactly, in these ideas, with the purport of 32.

Figure 35. An ancient war-club, of the character before noticed in Figure Number 4. It is here seen that the enemy possess the same effective weapon of assault.

Figure 36. Has no known significancy.

Figure 37. Unexplained.

Figure 38. Does not belong to the subject, or is unknown.

Section of the Inscription to the left of the line C. D.

The chief, who had evinced a marked degree of readiness and precision respecting the other parts of the inscription, appeared doubtful when his attention was drawn to the purport of this compartment. He said it had been so much defaced that most of the marks appeared without meaning. He thought, from what he could understand, that it was of a geographical character, and gave it this explanation. It appeared to be the territory of the Mong tribe, or confederacy.

Figure 39, 40. Villages and paths of this people or their confederates.

Figure 41. Mong's village, or the chief location of the Assonets, being on the banks of a river. It may also represent a skin flag used in the war, and the dance of triumph. The first interpretation is given as that to which the chief appeared to attach most weight, and as corresponding with his general idea of this portion of the inscription.

In this interpretation, Chingwauk confined himself strictly to the copy of Dr. Baylies and Mr. Goodwin, of 1790: the reason for this he did not mention. He probably found it fuller, giving some details which exist only in trace, or which are quite obliterated in the Rhode Island Historical copy. He was fully aware that the two drawings of 1790 and 1830 were copies of the same inscription taken at a period of forty years apart, and that the inscription was subjected to the action of the tide. The observer will notice that the primary and leading symbols, such as 1, 2, 3, 12, 26, 27, &c., upon which his interpretation turns, are equally plain in both copies. It will be further observed, that if numbers of the minor symbols and devices which the chief has employed, such as 5, 6, 7, 8, 9, &c., be wholly dismissed from the consideration of the inscription, it would not affect its turning incidents and general purport, as explained by Chingwauk. The interpretation would thereby lose some of its details, but it would still remain homogeneous, and be in entire conformity with the customs and pictorial art of the natives.

Owing to the probable age of the inscription, and its defacement by elemental action, it would require, at this time, a very careful and laborious process of copying it, with every appliance of scientific precision, in order to insure accuracy. No such copy, answering the highest requisites of exactitude, has, in my opinion, appeared. Nothing short of a coffer-dam, to exclude the tide permanently while the copying was in progress, would appear to meet this extreme requirement of exactness. With such a preliminary as the basis of operations, the whole surface of the rock could be impressed with a brush, with paper properly prepared, by means of which, inequalities of surface and fragmentary lines might be brought out and restored. It would also be desirable to submit the face of the rock to the process of the daguerreotype, the focus of which should be placed at such an angle as to catch the minutest shades of surface. No such process could be undertaken until the surface of the rock had been duly cleansed.

It will be noticed that Chingwauk has not employed any of the devices which are here attributed to a foreign origin, except Nos. 18, 19, 20. These devices resemble an hour-glass, or a closed cross. Such a cross is a symbol for a corpse in the northern pictography; but it would cease to be so, if it were not *closed*, as it is drawn in the Rhode Island copy. On the contrary, an open cross is the Roman character for ten. This question of a *closed*, or *open* cross, constitutes the turning point in its value in this inscription.

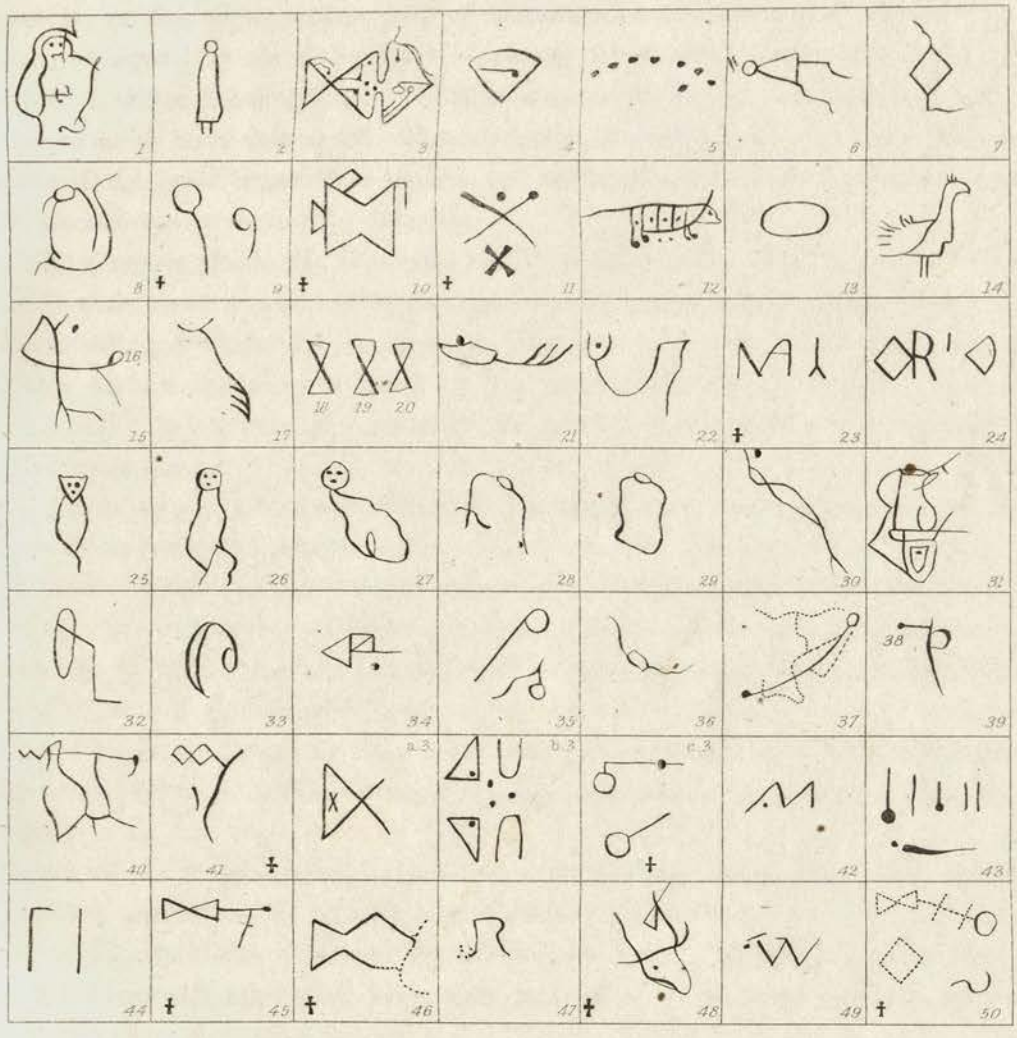
I called the attention of Chingwauk especially to the character in close proximity before Nos. 18, 19, 20, which resembles the ancient C, or sign of one hundred, and also to the sign for I, immediately behind them, and to the compound character regularly and closely following it, which Mr. Magnusen has interpreted to stand for men. He promptly threw them out, saying that they had no significancy in the inscription. It would seem by every fair principle of interpretation, that these six characters should be construed together. This view derives force from the consideration of the confessedly alphabetical characters below. By throwing Figures 18, 19, and 20 out of Chingwauk's interpretation, his record loses only the adjunct fact of an acknowledged loss of three men in the attack, while it restores to the Scandinavian portion, what is essential to it. The principles of lithological inscription, as they have been developed in ancient Iceland, appear to me to sanction the reference of this part of the foreign inscription to that hardy adventurous race, who were confessedly early visitors to America. Thus read, the interpretation of this part of the inscription furnished by Mr. Magnusen, appears to be fully sustained. Put it in modern characters, it is this: CXXXI men. The inscription below is manifestly either the name of the person or the nation that accomplished this enterprise.

The whole question of discovery turns on this. Not Scandinavia only, but Phœnicia, Gaul, and old Britain, may be considered as claimants.

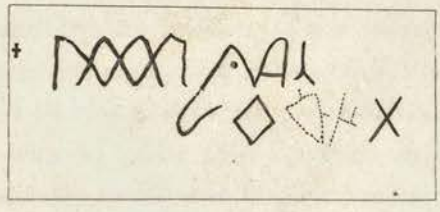
And here it must be confessed, my observation did not enable me to find the expected name of "Thorfin." The figure assumed to stand for the letters Th. is some feet distant from its point of construed connection, and several other pictographic figures intervene. If it be not the symbol of an Indian flag, or be thought to have a geographical significance, agreeably to the interpretation of Chingwauk, yet its admission as the character Th. would not serve to determine the name. The figures succeeding the ancient O [◇], cannot, by any ingenuity, be construed to stand for an F, I, or N. The terminal letter is clearly an X, or the figure ten. The intervening lines are all angular, and in this respect have a Runic or Celtic aspect. So far as they could, by great care, be drawn, they are exhibited in the presumed Icelandic part of the inscription, (Plate 37, Figure A.)

Future scrutiny of this part of the inscription is invited.

A precedence has been given, in point of age, to the Scandinavian, over the pictographic part of the inscription. This results, almost as a matter of necessity, from



SYNOPSIS OF THE ASSONET INSCRIPTION.



† *denotes the R.I. copy*

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its central and independent position on the rock. That the hint of the purport of such an inscription by foreigners should have been taken at a later period by the natives, to record their own traditions, may be accounted for on natural principles. Indeed, were there anything on the rock to denote the presence or existence of foreigners, in the pictographic part of the inscription, one might suppose that the Indians designed to show, by their drawing, the defeat of the very party of the Northmen, whose landing here in 1001 is contended for, at Copenhagen, whom they are admitted to have driven off. The admission of such a defeat by the invaders, and the use of the great war-club or balista, are circumstances in which the Scandinavian and Assonet record curiously coincide.

A full synopsis (Plate 37, Figures 1 to 50) is submitted. The figures on this plate coincide with those explained by Chingwauk to 41, and figures *a*, *b*, and *c*, of No. 3. The remaining devices appear to be as follows:

Figure 42 is a character rejected by the Indian expositor, as foreign to the pictographic part. It has been explained by the late Mr. Magnusen, to be an old anaglyph for the word men.

Figure 43 appears to denote warlike implements, of a character suitable to the Indian manners and customs.

Figure 44 consists of two characters rejected by Chingwauk, which are believed to stand for the ancient C, one hundred, and 1, a unit. It is upon this rejection, that figures 18, 19, 20, inclusive, between them, are transferred to the old northern or Icelandic part of the record.

Figure 45 is a device on the Rhode Island copy, which does not appear on the drawing of 1790. It is the representative figure of the trunk of a man, or a headless enemy.

Figure 46 is a fragmentary device of the Rhode Island copy, which corresponds, so far as it is perfect, with No. 10 of the drawing of 1790.

Figure 47 appears to be something raised, as a banner, by No. 27. The lines that compose figure 43, appear to have been parts of a device, some essential portions of which have become indistinct.

Figure 49 appears foreign, and has no significance as a pictographic device, agreeably to the papers hereafter introduced.

This leaves as the Scandinavian portion of the inscription, the figures which are denoted in the compartment arranged at the bottom of Plate 37. Of this inscription, figures 44, 18, 19, 20, and 44 bis., are to be read, CXXXI. The figure on compartment 23 consists of two devices. The first has been interpreted by Mr. Magnusen, (Ant. Amer.) as an ancient anaglyph, standing for the word men. The second figure of this compartment is taken from the R. I. C. of 1830. By comparison of this figure with the Runic alphabet, it is thought to resemble, though it wants the down stroke

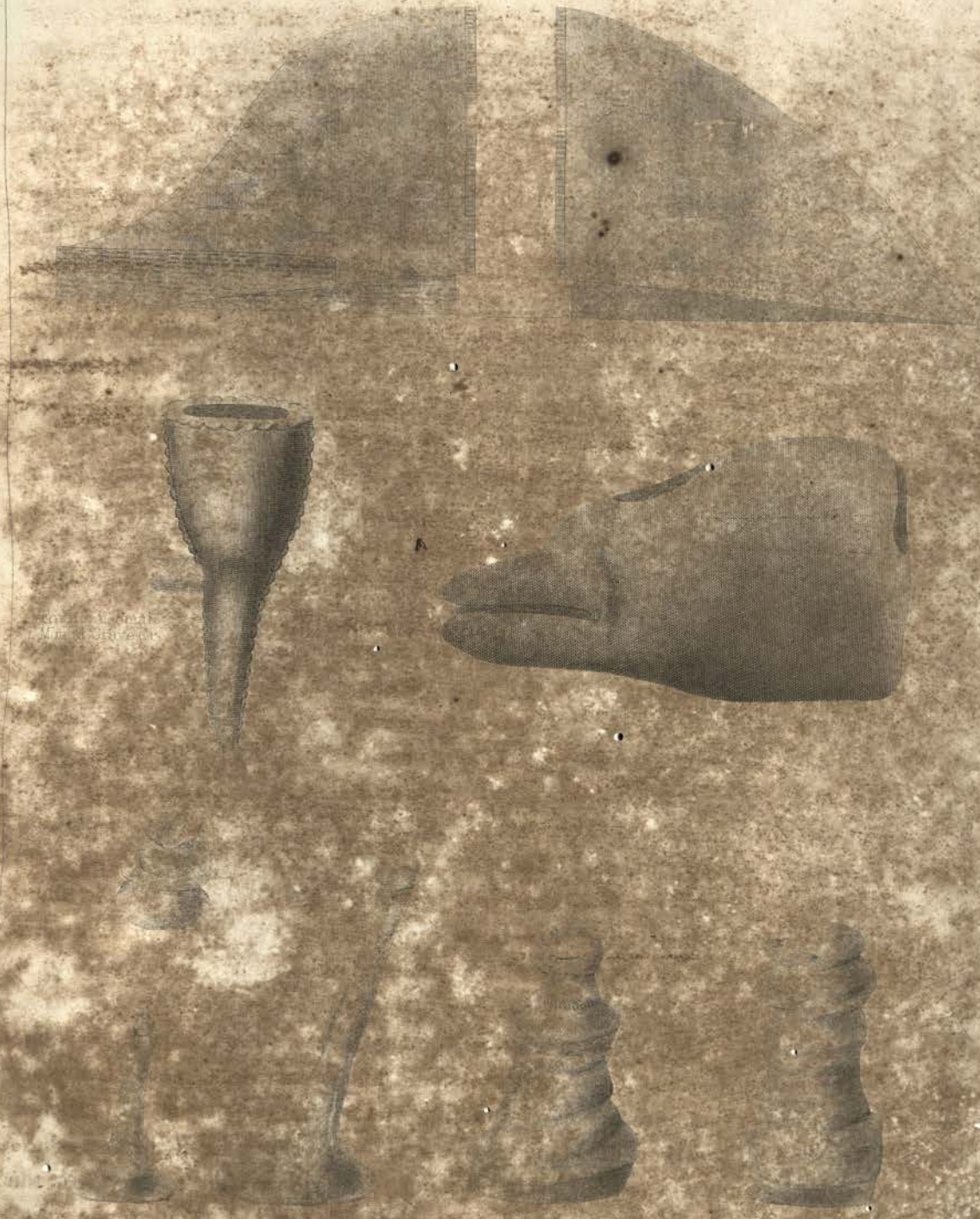
of the letter *aur* [ᛦ], which we are informed was the ancient word for a *bow*, or *money*. (Vide Marsh's Gram., p. 162.)

With respect to the characters which should be inserted after the letters ◇ R, in the inscriptions of 1790 and 1830, we have felt much hesitancy. There is doubtless something to be allowed for tidal deposit, for the obscuration of time, and for the want of a proper incidence of light. But with every allowance of this kind, and with a persuasion that this part of the inscription is due to the Northmen, it did not appear that the characters usually inserted could be assigned to fill this space. Nor did it appear that the letter R could be recognised. It is certain that the penultimate character is an X, or less probably the cardinal number 10. Some shadowing forth of the intermediate characters is given on the upper margin of Plate 36; but no positive determination can be made of their alphabetical value. Without doubt, the archæologist is here to look for the NAME of, either the leader of the party, or of the nation, or tribe, to which the adventurers belonged. A careful and scientific examination of the subject, with full means and ample time, is invited.

One remark may be added. Examinations have shown that the great forests and lake basins of America are not without analogous inscriptions. In the article devoted to "pictography," in the following papers, this subject is treated on the basis of personal investigation, and it is believed that the inscriptions which have been copied at various points of the interior are such as will commend the subject of the Indian symbolic and mnemonic method of inscription to respect. It is a subject that will be pursued in subsequent parts of this work.

2. NOTICE OF AN INSCRIPTION IN ANTIQUE CHARACTERS, FOUND ON A TABULAR STONE, OR AMULET, IN ONE OF THE WESTERN TUMULI OF, PROBABLY, THE BEGINNING OF THE SIXTEENTH CENTURY.

The discovery of an inscription in a large tumulus near Wheeling, in Western Virginia, gives an importance to the opening of that mound which it would not otherwise possess. This archæological discovery was made, as Mr. Abelard Tomlinson the proprietor states, (Vide Western Pioneer) on the sixteenth of June, 1838. The country had then been settled fifty-seven years, and had been first explored two years earlier. Mr. Jesse Tomlinson, the original proprietor, and uncle of Abelard, had carefully guarded it, and prevented any excavations from being made, or any of the forest trees, with which it was covered, from being cut. He yielded, at length, to the public curiosity to explore its contents, when his nephew, Abelard Tomlinson, entered into an arrangement with some other persons to execute the work on a fixed plan of excavation. They ran a horizontal gallery into its centre, and sunk a shaft from its top to intersect this audit, as represented in Plate 12, Figure 1.



To penetrate a tumulus of earth of three hundred and thirty-three feet in circumference, and seventy feet in height, (Plate 5, Figure 2,) with an unbroken surface, bearing large trees, was not a light work, and it appears that the labor of several hands, for a number of months, was required.[1] The results, which have been recorded in the pages of the American Pioneer, Volume 2d, page 197, were the discovery of two rude tombs containing skeletons, and a number of beads, amulets, and shells; but nothing indicative of an unusual civilization in the builders of this tumulus, except the inscription stone; even if the block-prints, discoidal stones, syphons of steatite, and watch-towers, hereafter to be noticed, be thought to denote a higher state of wants than the Indian tribes had, they were not the wants of high civilization. Little or no importance appears to have been attached to the inscription for several years.

The men engaged in the work were no archæologists. It was supposed to be in Indian characters, and they are called "hieroglyphics" by Mr. Townsend, a writer who described the opening of the mound in a letter which was published in the Cincinnati Chronicle, a weekly gazette, of Febuary 2d, 1839. He also gave a drawing of the inscription.[2] A copy of this paper was transmitted to me by a friend. Having, at the same time, a copy of Mr. March's Grammar of the Icelandic, of 1838, the appendix to which contains the *Runic alphabet*, I observed some corresponding characters. By reference to an inscription from Dr. Plott's History of Staffordshire, it was also seen that there were several of the characters quite identical with the ancient form of the Celtic alphabet, as employed in Britain in the, so called, Stick-Book. A copy of the inscription (Townsend's copy) was transmitted to Professor Rafn, at Copenhagen, the distinguished Secretary of the Royal Society of Northern Antiquaries. Mr. Rafn does not find it to be Runic, but is disposed to consider the inscription Celtiberic. *Memoires de la Societé Royale des Antiquaries du Nord*, 1840–1843, p. 125.

Mr. Abelard B. Tomlinson states, in a letter above referred to, that he commenced opening the mound on the 19th of March, 1838; that he wrought at the excavation himself; and that he found the first or lower vault on the 4th of April, and the second or upper vault on the 16th of June of that year. That the osseous remains of two human skeletons in a state of decay, were found in the first, one of which had six hundred and fifty beads, and a small yoke-shaped ornament or implement, with two perforations; the other was without any ornament whatever. That the upper vault contained the remains of but one skeleton, and a great number of trinkets, the chief of which were seventeen hundred bone-beads, five hundred sea-shells, one hundred and fifty pieces of mica, five copper wrist and arm bands, and a small flat stone, of which he furnishes a fac-simile, page 195, about three eighths of an inch thick, with an engraving.

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[1] We understand that the estate of Mr. Jesse Tomlinson was charged with $2,500 for this work.

[2] This was subsequently found to have been copied with some material inaccuracies.

Dr. Samuel George Morton, in his Crania Americana, page 201, publishes extracts of a letter from Dr. James W. Clemens of Wheeling, of the general date of 1838, in which he describes the opening of the mound, and the various objects discovered, without mentioning the inscribed stone, unless it be included in the general term, "together with various articles of minor interest," page 222, Crania Americana. It is to be regretted as an historical question, that the precise date of this letter is not given. But little interest appears to have been excited by the "stone," and nobody, if we refer to the first accounts, appears to have regarded it as containing alphabetical characters.

Mr. Clemens falls into the popular error of considering the beads as "ivory." They have been found to be formed of sea-shells, (see Transactions of the American Ethnological Society, Vol. I.,) and agree in their shape with the ancient wampum as disclosed in Western New York and at Beverly in Canada. He also states the cortical layers of the large oak which stood at the top of the central part of the mound, at three hundred: they are stated by Mr. Tomlinson at about five hundred, (Am. Pioneer, page 199.) This appears to be a point of some importance, as by the latter statement, we have the date of A. D. 1338, as the era of the abandonment of the mound, and by the former, A. D. 1538, or *forty-six years after* the discovery of the country by Columbus.

De Leon discovered Florida in 1512.

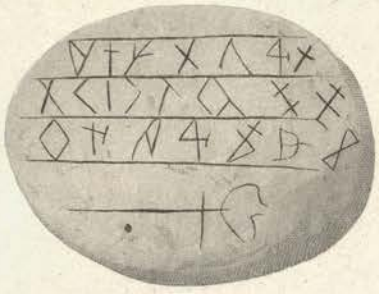
From the collection of Terneau Campans, the mouth of the Mississippi appears to have been discovered in 1527. There would be no inconsistency in supposing that some of the followers of De Soto had carried a Celtiberic inscription into the valley of the Ohio.

Dr. Morton (Crania Am., Plate 53) gives a figure of the cranium found in the upper vault, from a drawing by Mr. Clemens, and states its facial angle at 78°. This cranium has been recently drawn by Capt. S. Eastman, U. S. A., from the original in the possession of Dr. De Hass of Virginia, (See Plate 38, Figure 6.) Its posterior developments appear to be large, and assimilate it to the Southern type of crania.

M. Jomard, of Paris, (vide *Seconde Note sur une Pierre Gravée trouve dans un ancien tumulus Americain,*) is inclined to deem it an inscription in the ancient Libyan language. He had before him, however, but an imperfect copy of the inscription, which was transmitted in 1839, by Mr. Eugene Vail; being the copy originally published in the Cincinnati paper by Mr. Townsend, which had misled others.

Dr. Wills De Hass, of Grave Creek, has recently (1850) brought to Washington the original stone, a fac-simile of which is given by Capt. S. Eastman, U. S. A. (Plate 38, Figure 1.) He has also copied its reverse, (Figure 2.) These drawings accurately correspond with the copy published by the American Ethnological Society in 1846. The same artist has also copied the ancient Celtic inscription before referred to, (Plate 38, Figure 3); also a curious device, found in one of the minor mounds at Grave

1

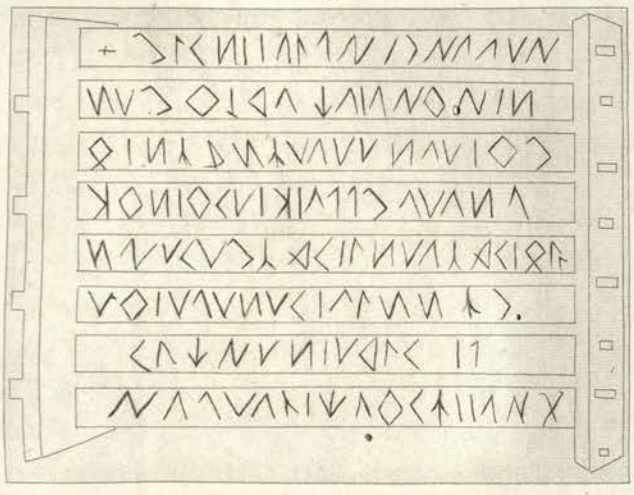


Face

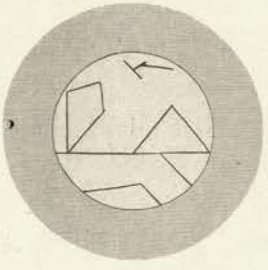
2

Reverse

3

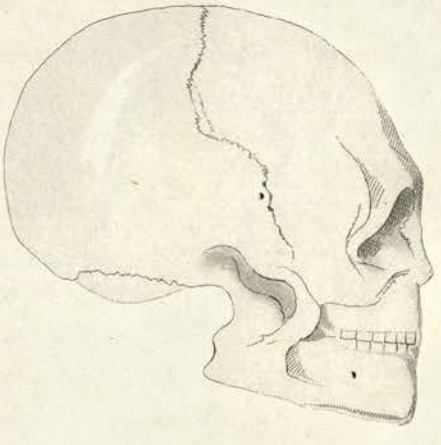


4



5

6



Figures 1.2.5. and 6. drawn from the originals by Capt. S. Eastman, U.S.A.

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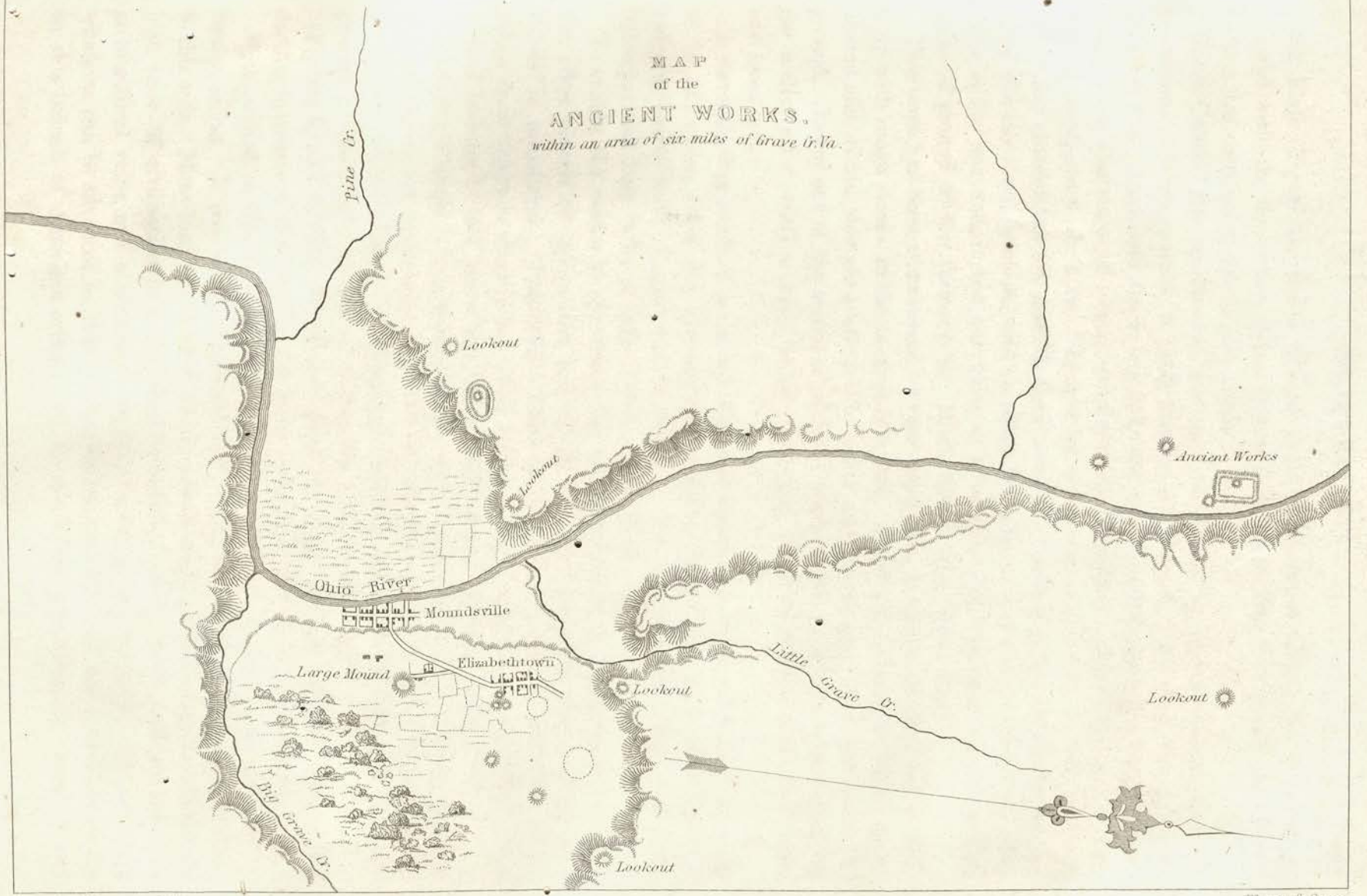
STONES WITH INSCRIPTIONS AND SKULL FROM GRAVE CREEK MOUND

PUBLISHED BY LIPPINCOTT, GRAMBO & CO PHILAD^A

MAP
of the
ANCIENT WORKS,
within an area of six miles of Grave Cr. Va.



Drawn by S. Eastman, U.S.A.

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PUBLISHED BY LIPPINCOTT, GRAMBO & CO. PHILADA.

Creek Flats (Figure 4); and a circular stone, without inscription, but identical in material with the inscription stone, (Figure 5.) These facts will enable the reader to form his own judgment in the matter.

Grave Creek Flats appears to have been the site of an ancient Indian town of importance. Seven mounds, or their remains, still existed upon these flats in 1844, although the plough and the spade had done much to obliterate the smaller ones. There were also traces of a large circular work, embracing a part of the public road leading north-east to the hills. The relation of these several objects is shown by Plate 39. After crossing this low ground, there were also traces of a circumvallation on the more elevated level grounds; and on rising the hills to Parr's Point, there was still, quite entire and undisturbed, the ruins of a tower or look-out, upon a commanding point of ground on the farm of Mr. Mitcheltree. (See Plate 39.)

This work had been commenced by excavating the earth several feet, and walling it up with rough stones, in the manner of a well. From the quantity of fallen stones around and within this excavation, this tower must have been many feet above the ground. Every one of the stones of which it is composed, must have been carried up the acclivity for nearly a mile; as the surface of the hills consists entirely of loam and loose soil.

A corresponding work of a similar character appears to have existed on the apex of the hill which forms the opposite banks of the Ohio River, in Belmont County; and a defensive work of some extent exists on the high grounds back of this apex, but separated from it by a deep ravine. (See Plate 39.)

To enable the reader to appreciate the relative position of the great mound, and the other objects of antiquarian interest in its neighborhood, a plat of the entire "flats" is introduced. (Plate 39.) There is also added, a view of the Ohio River, taken from the rude observatory which has been constructed at the top of the great mound looking to and across the Ohio, into Belmont County. (Plate 75.)

Plate 29, Figures 1, 2, 3, 4, represent a stone block-print and its reverse, found in one of the minor mounds in the town of Elizabethtown, on the superior plateau of the Grave Creek Flats. This antique object is analogous to a print of the same character, found in a mound in Cincinnati. (Plate 23, Fig. 5.)

Figures 5, and 6, Plate 29, denote porphyry axes; perhaps another form of the fleshing instrument, disclosed by the minor mounds of the Grave Creek Group.

With regard to the inscription, it may be said, if genuine, to be intrusive, and of foreign origin. It has belonged to some adventurer, or captive carried by the tribes to this spot. Many contend, on what are considered slight grounds, for a comparatively high state of civilization in the ancient inhabitants of the West, and adduce their architectural ruins, and attainments in fortification, as a proof of it. But, granting whatever can be advanced on this head, it would contradict all our actual knowledge on this branch of American archæology, to admit the possession, by them, at any

period known to us, of an alphabet of any kind. The characters employed in picture writing by the Toltecs and Aztecs, were symbolic and representative, and they have left irrefragable evidences of their high proficiency in them: but nothing more. There can be no pretence that any Indian race who ever inhabited this valley possessed an alphabetic art. The inscription of this tumulus, if it be true, is foreign. The question of its genuineness must rest on the veracity of Mr. Tomlinson, and his neighbors who have united in his statements. On the score of its being of Iberic origin, the account of Dr. Clemens, who is the least favorable to the antiquity of the mound, opposes no bar to a foreign theory. Giving, as his facts do, the date of 1538, puts it twenty-six years after the discovery of Florida by De Leon, and one year subsequent to the discovery of the mouth of the Mississippi by Narvaez. A stronger objection is found in the inability of the Copenhagen antiquarians to read it, while acknowledging a large portion of its character to be in the Spanish type of the Celtic. The following characters are common, it will be seen, to the inscription at Dighton Rock and Grave Creek Mound, namely: ◇ X | . A still greater amount of resemblance to it appears in the "stick-book" character of the ancient British Celtic. This is perceived in the characters ◇ ⟨ | ⟩ Λ X ⋊ , which are common to both inscriptions, namely, the Celtic and the Virginic. There would appear to be some grounds here for the Welsh tradition of Madoc.

We have thus three inscriptions, which appear to have been made in the same mixed character, or to have something in common. Elements of an alphabet are seen which were known to many nations of Western Europe, and were originally derivative from the banks of the Mediterranean, before the introduction of the Roman alphabet.

3. Devices on an Antique Globular Stone, found in the Ohio Valley.

Every fact relating to asserted inscriptions of ancient date, on this continent, requires the closest scrutiny. But we are not at liberty to deny record to any well attested report. There was found in one of the group of minor mounds of the Grave Creek Flats, in the Ohio Valley, a small globular stone, about one inch and a half in diameter, containing some devices, which resemble those of the inscribed stone alleged to have been found by Mr. Tomlinson in the large mound at that place. A cast of this stone was presented to me in 1844, during a visit to that place, by Dr. Wills De Hass, of which a copy, with its inscriptive matter, is given in Plate 38, Figure 4. The characters on this stone appear to be as follows, ◇ Λ 4 . There

Plate 40.

Drawn by Captn S. Eastman, U.S.A.

Eng^d by J.C. Mc Ras.

RUINS OF AN ANTIQUE WATCH TOWER, PARR'S POINT, GRAVE CREEK FLATS.

Plate 75

Drawn by Captn S. Eastman U.S.A.

Eng^d by J.C.Mc Rae

OHIO RIVER FROM THE SUMMIT OF GRAVE CREEK MOUND.

is some eccentricity in the forms of the letters. The first is recognised on the Dighton Rock.

Nothing is more demonstrable than that whatever has emanated in the graphic or inscriptive art, on this continent, from the Red race, does not aspire above the simple art of pictography; and that wherever an alphabet of any kind is veritably discovered, it must have had a foreign origin. By granting belief to any thing contravening this state of art, we at first deceive ourselves, and then lend our influence to diffuse error.

4. An Ancient Shipwreck on the American Coasts.

Iroquois tradition preserves the account of the wreck of a vessel, in the ante-Columbian era, on a part of the Southern Atlantic Coasts, occupied by one of the tribes of that ancient and leading stock of men — namely, the Tuscaroras. This division of that confederacy then lived in the present area of North Carolina. The story is stated by Cusic, in his curious pamphlet of the historical traditions of the Six Nations, published at Lewiston, in Western New York, about 1825. Cusic had reflected much on the position of the Iroquois in our aboriginal history; and waited, it seems, for some one more competent than he deemed himself to be, to undertake the task of writing it. But at length he determined to do it himself, and acomplished the work with his mind replete with traditions, but with a very slender knowledge of the structure of the English language. His ignorance of general chronology, and of the very slow manner in which the dialects and languages of the human race must have been formed, was profound; and his attempts to assimilate the periods of the several Atotarhoes or leading magistrates of that famous league of aboriginal tribes, are utterly childish and worthless. Not so with his traditions of events. When he comes to speak of the Indian mythology, and beliefs in spiritual agencies, the monster period, and the wars and wanderings of his people, he is at home, — and history may be said to be indebted to him for telling his own story of these things in his own way. So much for Cusic.

The account of the shipwreck runs somewhat after this manner. While the bulk of the Iroquois were yet in the St. Lawrence Valley, a ship appeared on the coast, and was driven southward and wrecked. The natives aided in saving them. The adventurers were in leathern bags, and were carried by hawks to an elevation. They afterwards went to another situation, where they increased so much as to excite the jealousy of the natives. They were finally overrun and eaten up by great monster quadrupeds, which overspread the country.

Stripped of its hyperbole, this story may be supposed to tell, that the mariners were dressed in leathern doublets, and owed their rescue from the waters to a tribe called

Falcons; that they flourished by following the principles of civilization; so as, in the end, to excite the enmity of those who had saved them, and that the infant colony was exterminated in blood.

This tradition probably affords a gleam of the lost colony of Virginia, and veils in metaphor the treachery and turpitude of the natives. Nothing would comport better with the Indian character of concealment, than to have shrouded this act of cruel extermination under the figure of the ravages of monsters. The Tuscaroras, who relate the event, are known to have been, from the beginning, unfriendly to the whites. The terrible massacre which they had planned, and in part executed, against the North Carolinians in 1711, was probably a recurrence in their minds of a prior tragedy of this kind, which had proved successful. Even if the first Virginia colony, which perished at "Croatan," had been exterminated by the Powhatanic tribes, the knowledge of its success may be considered to have been sufficient to inspire the Tuscaroras with hopes of like triumph in their own nefarious design.

5. Skeleton in Armor.

[The following description of certain human skeletons, supposed to be in armor, found at Fall River, or Troy, in Massachusetts, is from the pen of George Gibbs, Esq. It is drawn with that writer's usual caution and archæological acumen.]

Some years since, accounts were published in the Rhode Island newspapers, and extensively copied elsewhere, stating that a skeleton in armor had been discovered near Fall River, on the Rhode Island line. A full description was also published in one of our periodicals (it is believed the American Monthly Magazine), and thence copied into Stone's Life of Brant (appx. 19, Vol. 2), in which, from the character of the armor, it was conjectured to be of Carthaginian origin — the remains of some ship-wrecked adventurer. Other theories have been more recently started, in consequence of the discoveries of the Northern Society of Danish Antiquaries, and their interpretations of the hieroglyphic figures on the rocks at Dighton and elsewhere, which attribute the remains to one of the fellow-voyagers of Thorfin. These speculations, however, seem to have been made without any critical examination of the bones themselves, or the metallic implements found with them. The discovery, during the last summer (1839), of other bodies, also with copper ornaments or arms, led to a more particular inquiry, and my informant, who was then at Newport, proceeded to Fall River for the purpose of inspecting them. The following description was prepared by him from notes taken on the spot, and is to be relied on as strictly accurate. It may serve to correct a false impression in a matter of some historical importance, and for that reason only is deemed worthy of attention.

"The Skeleton found some years ago is now in the Athenæum at Troy. As many of the ligaments had decayed, it has been put together with wires, and in a sitting posture. The bones of the feet are wanting, but the rest of it is nearly entire. The skull is of ordinary size, the forehead low, beginning to retreat at not more than an inch from the nose, the head conical, and larger behind the ears than in front. Some of the facial bones are decayed, but the lower jaw is entire, and the teeth in good preservation. The arms are covered with flesh and pressed against the breast, with the hands almost touching the collar-bone. This position, however, may have been given to it after being dug up. The hands and arms are small, and the body apparently that of a person below the middle size. The flesh on the breast and some of the upper ribs is also remaining: it is of a black color, stringy, and much shrunk. The leg bones correspond in size and length with the arms. A piece of copper plate, rather thicker than sheathing copper, was found with this skeleton, and

has been hung round the neck. This, however, does not seem to be its original position, as there were no marks on the breast of the green carbonate with which parts of the copper was covered. This plate was in shape like a carpenter's saw, but without serrated edges; it was ten inches in length, six or seven inches wide at top, and four at the bottom; the lower part broken, so that it had probably been longer than at present. The edges were smooth, and a hole was pierced in the top by which it appears to have been suspended to the body with a thong. Several arrow-heads of copper were also found, about an inch and a half long by an inch broad at the base, and having a round hole in the centre to fasten them to the shaft. They were flat, and of the same thickness with the plate above mentioned, and quite sharp, the sides concave, the base square and not barbed. Pieces of the shaft were also found.

The most remarkable thing about this skeleton, however, was a belt, composed of parallel copper tubes, about an hundred in number, four inches in length, and of the thickness of a common drawing-pencil.

These tubes were thin, and exterior to others of wood, through each of which a leather thong was passed, and tied at each end to a long one passing round the body.

These thongs were preserved, as well as the wooden tubes; the copper was much decayed, and in some places gone. This belt was fastened under the left arm, by tying the ends of the long strings together, and passed round the breast and back a little below the shoulder-blades. Nothing else was found, but a piece of coarse cloth or matting, of the thickness of sail-cloth, a few inches square. It is to be observed that the flesh appeared to have been preserved wherever any of the copper touched it.

I could not learn the place where this body was found, or its position.

With respect to the bodies found this summer, I saw the man who dug them up. They were found in ploughing down a hill, in order to open a road, about three or four feet under ground, some two or three hundred yards from the water, and nearly opposite Mount Hope.

There appeared to have been at least three bodies interred here, but they were entirely broken up by the plough; one skull only, which resembled in shape the one above described, being found whole. The flesh on one of the thigh-bones was entire, and similar in color and substance to that in the first skeleton, and like that. It bore the marks of copper rust. Three or four plates of copper like that first found were discovered, one having a leather thong through the hole in the top. Arrow-heads of copper were also found, and parts of the shafts. One arrow-head was fastened on by a piece of cord like a fishing-line well twisted, passing through the hole, and wound round the shaft. There were also some more matting, a bunch of short, red, curled hair, and one of black hair, but neither resembling that of a man, and a curved bar of iron about fourteen inches long, much rusted, not sharpened, but smaller at one end

Capt. S. Eastman, U.S.A.

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LOCAL MANITO.

than at the other. It did not appear to have been used as a weapon. These were all the remains discovered."

Such are the famous Fall River skeletons. But little argument is necessary, to show that they must have been North American Indians. The state of preservation of the flesh and bones, proves that they could not have been of very ancient date; the piece of the skull now exhibited being perfectly sound, and with the serrated edge of the suture.

The conical formation of the skull peculiar to the Indian, seems also conclusive. The character of the metallic implements found with them, is not such as to warrant any other supposition.

Both Rome and Phœnicia were well acquainted with the elaborate working of iron and brass; these were apparently mere sheet-copper, rudely cut into simple form; neither the belt nor plates were fit for defensive armor. And lastly, the use of copper for arrow-heads among the Indians at the arrival of the Puritans, is well authenticated. Mention is made of them by Mourt, in his Journal of Plymouth Plantation, in 1620, printed in the eighth volume of Massachusetts Historical Collections, pages 219–20; in Higgeson's New England Plantation, first volume of Massachusetts Historical Collections, page 123, and in various other places. They are also found in many of the tumuli of the West. Those of the New England Indians may have been obtained from the people of French Acadie, who traded with them long before the Plymouth settlement.

From these circumstances it appears that the skeletons at Fall River were those of Indians who may possibly have lived during the time of Philip's wars, or a few years earlier, but that they are only those of Indians.

IV. PHYSICAL GEOGRAPHY OF THE INDIAN COUNTRY. A.

IV. PHYSICAL GEOGRAPHY.[1]

A. Geographical memoranda respecting the discovery of the Mississippi river, with a map of its source.
B. Gold deposit of California.
C. Mineralogical and geographical notices, denoting the value of the aboriginal territory.
1. Tin on the Kansas river, with a sketch.
2. Wisconsin and Iowa lead ores.
3. Black oxide of copper of Lake Superior.
4. Native silver of the drift stratum of Michigan.
5. Petroleum of the Chickasaw lands.
6. Artesian borings for salt in the Onondaga plateau.
7. Geography of the Genesee country of Western New York.
D. Existing geological action of the Great Lakes, with a Plate.
E. Antique osteology of the monster period.
F. An aboriginal Palladium, as exhibited in the Oneida Stone, with a Plate.
G. Minnesota.

A. GEOGRAPHICAL MEMORANDA RESPECTING THE PROGRESS OF THE DISCOVERY OF THE MISSISSIPPI RIVER, WITH A MAP OF ITS SOURCE.

1. It appears, from the archæological collections of *Ternoux Campans,* that the mouth of the Mississippi was discovered by the Spanish from Cuba, under M. Narvaez, the contemporary and antagonist of Cortes, in the month of November, 1527, during an expedition made with boats to trace the Floridian coasts of the Gulf westwardly.[2] Mexico had fallen into their hands but six years before—an event by which a period

[1] The connection of these papers with the past and present history and condition of the Indian tribes, who are the immediate subject of these inquiries, will be recognised.

[2] This fact is not, however, specially stated in the loose translations of Ternoux, which are without maps of the journey. The inference is plain.

was put to the Aztec empire, and a spirit of conquest and discovery awakened, which soon left no part of the continent unexplored, or unvisited. Expeditions, by land and water, were made far and wide, and it is only a matter of surprise that, while the Panuco and other minor streams were carefully searched, the Mississippi, which pours out its vast alluvion, and carries more water into the Gulf than any other stream, if not a volume equal to all the rest united, should not have been identified even at an earlier period. That such a river entered the Gulf from the North appears to have been early rumored; but whatever was known to the Spaniards, they long concealed the knowledge from other nations; and it is only, indeed, since the date of the series of publications above-named, that the account of the first discovery of the Mississippi, at that early date, has become generally known to authors.

2. De Leon had discovered Florida in 1512; but De Soto was the first of his countrymen who, in the spirit of the age, prepared to undertake, at large, the discovery of the interior of the vast Indian territories lying north of the Gulf, which now compose the United States. If he was disappointed on his march in stumbling on kingdoms abounding in gold and wealth, such as Cortez and Pizarro had found in the South, he may be said, in falling on the Mississippi river, to have found a valley more intrinsically valuable, in after times, than any or all the discoveries of his more famous predecessors. It was in 1541 that he reached the banks of this stream. It is, to some extent, uncertain at what particular point he struck it, or how far his followers penetrated north. It is manifest from the existing names of streams and places that he passed through territories occupied by the Cherokees and Musgogees. Antiquarians and ethnologists may well examine this question, in all its bearings, as it is not improbable that some features of our western antiquities, lying north of the mouth of the Ohio, which it is common to refer to earlier times, may be found to have had their origin no farther back than the era of the expedition of De Soto.

3. When De Soto landed in Florida, the present area of the United States, and all north of it, remained a vast terra incognita. The Cabots had seen the North Atlantic coast in 1497; the Cortereals had probably followed his track. Beyond this its geography remained a blank. Its rivers, and mountains, and lakes, were not even conjectured, or, like the nebulæ of astronomy, served only as the basis for hypothesis.

Cartier, who ascended the St. Lawrence eight years later, namely, in 1535, appeared to have had no idea, if we are to judge by his journals, either that there was such a river as the Mississippi on the continent, or that it lay west of the vast, unexplored territories which he apprehended the Indians to call "Canada." This navigator, on his second voyage, ascended to the island and town of HOCHELAGA, which he reached on the 3d of October, 1535, and to the apex of which he gave the name of *Mont Royal*. Donnaconna, standing with him on the island mountain, told him, speaking of the river St. Lawrence, that it originated so far off, "that there was never man heard of, who had found the head thereof;" that it passed through several great

lakes; and there was "a fresh-water sea,"—which is, indeed, the idea graphically conveyed by the Indian term for Lake Superior.

The idea of the Great River of the West was doubtless derived from the discoveries of De Soto, and the earlier attempts of the Spanish adventurers from Cuba to trace the northern shores of the Gulf towards Mexico. France did not avail herself of the primary discoveries of Cartier, or rather failed to turn them to practical account. The opinion that Canada was unfruitful, and its vast domains were not gold-bearing regions, and that they contained no new element of commerce beyond the fisheries of Newfoundland, and the fur trade, appears to have chilled the ardor of enterprise. It was not, at least, till the era of Champlain, A. D. 1608, that any thing deserving the name of a French colony was founded in Canada.

4. Meantime, there had come from the West, as from some newly-descended El Dorado, the Algonquin name of Mississippi; which was conjectured to denote the same great river which the Spaniards had seen at its mouth in 1527, and which De Soto had explored in 1541–2.[1] To determine this fact, became a point of geographical interest. But the French colonial government found its utmost energies taxed, to maintain its position against the Iroquois confederacy, without authorizing an expedition or public commission, to explore the great and unknown river. Full seventy years more elapsed, before such an enterprise was authorized. Meanwhile, French commerce and missionary zeal had explored the great lakes, and established posts and missions at Sault Ste. Marie, Michillimackinac, and other early occupied and well-known points.

It was not till 1678,—a century and a half from the original discovery of its mouth,—that Robert de La Salle came out from France, with full authority from the crown, to explore the country and establish colonies. This enterprising, hardy, and high-minded explorer of American geography, directed all his energies to the South and South-west; and he was the true cause of all the incidental explorations of this stream of that era, for some nine hundred or a thousand miles above the mouth of the Illinois, as well as those directed to proceed to its issue, into the Gulf.[2]

Pierre Marquette, a Jesuit, a man of education and family, opened the path of discovery in that year, by passing from Green Bay, through the interlocking valleys of the Fox and Mindota, or Wisconsin Rivers,—from the mouth of the latter of which, he descended the Mississippi to the Illinois; on his return, he proceeded to Lake Michigan, where he died. He was, therefore, if we do not misapprehend, the first

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[1] The narrative of the expedition of Narvaez has never been translated: it is inaccessible to the common reader. Its early date makes it an important document, which it is hoped may be soon given to the public.

[2] Hennepin says two hundred and fifty leagues above the point of his capture—which is stated to have been one hundred and fifty leagues above the influx of the Illinois—vaguely guessed, but still approximating to the true distance.

explorer of the Mississippi, in the section of this stream lying between the mouths of the Wisconsin and Illinois.

Lewis Hennepin had accompanied La Salle to the Niagara; was present at his opening councils with the haughty Iroquois, also at the building of the first vessel designed to navigate the lakes, and accompanied him in it to the position of Green Bay, and afterwards in canoes, by way of "the Miami,"—now St. Joseph's[1]—to the Illinois. A Recollet, bent only on exercising the appropriate functions of his order among the Indian tribes, he descended the Illinois from the site of Fort Crevecœur, with two men, (Picard and Aco); while La Salle, pressed by the imminence of his affairs, returned *by land, on snow-shoes,* to Fort Frontenac.[2] The descent of the Mississippi by Hennepin, from the Illinois to the Gulf, has been called in question, with apparent good reason, from discrepancies in his first published and subsequent accounts; from which it is very much doubted how far he actually descended, or whether he ever descended below the Illinois. This doubt does not attach to his capture by hostile Indians, several days' journey above the mouth of the Illinois, and being carried by them above the Falls of St. Anthony, to the River St. Francis; both which received their present names from him. This constitutes the most northerly point of his voyage, and denotes the true, undisputed field of his exploration.

5. The unfrocked monk, Geudeville, who travelled extensively in Canada, and published his "New Voyages to North America," under the name of the Baron La Hontan, is the next claimant to notice, in the section of the upper Mississippi, above the mouth of the Wisconsin.—It is doubted how far this jolly soldier and *bon vivant* travelled west. He had served at various points in the interior, and leaves no reason to doubt his presence, at various times, at St. Joseph's, (now Fort Gratiot) Michillimackinac, Green Bay, and other points in the region of the upper Lakes. It is the opinion of persons best acquainted with the geography of the river Wisconsin, that he went no farther than Green Bay. Others have seen in the description of the Fox and Wisconsin Valleys, evidences of his writing from personal observation, although there is nothing between the extreme eastern and western points of these two valleys, described by him, which he could not have fully learned at Green Bay from the Indians, or the *Couriers du Bois.* However this may be, there can be but little question of the character of the fiction he attempted to palm off on his European readers, by the description of his discovery and exploration of a great stream falling into the Mississippi, some nine days' journey above the Wisconsin, to which he gives the name of "Long River."

6. Geographers have in vain searched for "Long River." If either the upper Iowa, the Canon River, (called La Honton by Mr. Nicolet,) or the St. Peter's, be meant,

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[1] Of Lake Michigan.

[2] On Lake Ontario. Let no American boast that he has exceeded this piece of hardihood.

neither of these streams correspond at all to his description. The St. Peter's, the largest and longest of the number, would not suffice, in length, for a tenth part of his protracted voyage, extending from November 3d to January 26th. Of the "*Eokoros*," "*Essanapes*," and other populous tribes of sounding names, mentioned by "The Baron," no one, before or since, has ever heard. All these streams, as is well known, were inhabited during the latter-part of the 17th century as at this day, exclusively by tribes of the Dacotah or Sioux family. Indeed, the entire portion of the Baron's letter, dated Michillimackinac, May 28th, 1689, (page 109 to 135, Vol. I., London, 1703,) in which he describes his voyage and discoveries on this extraordinary stream called "Long River," as well as his subsequent visit *to*, and *up*, the Missouri, is a literary curiosity, which, if we except the famous imaginative history of Formosa, is unexcelled in bibliography, for its bold assumption in attempting to impose on a credulous age a tale of fancied adventures and fictitious observations.

Yet, unlike the Formosian history, it details no imminent perils — no curious discoveries — no striking observations — no thrilling events — not a feature, indeed, which, as a work of fancy, may be seized on, to redeem or excuse the details of its clumsy and unblushing improbabilities.[1] He nowhere impresses us with having seen the Mississippi at all — far less that portion of it above the mouth of the Wisconsin, which is embosomed in high cliffs of rock, often of the most picturesque shapes, and presenting, on every hand, views of the most striking grandeur and pleasing beauty. He does not notice a single one of its most remarkable scenes — not a word of the mountain island — *les montagne des tromps d'eau* — nothing of the beautiful expanse of Lake Pepin, with its storied cliff, the peak of *La Grange*, or the Falls of St. Anthony; which could not have failed to attract the gay visitor, had he gone so near to it as the St. Peter's.

7. These notices constitute not the only, but the chief record of the explorations of the upper Mississippi, during the period of the French supremacy in the Canadas and Louisiana. Charlevoix, who saw the country some thirty-two years after the death of La Salle, on a general visit to the French missions, passed, in 1720, from the Lakes to the Mississippi, by the way of the Illinois. He made judicious and useful observations on the scenes and subjects coming before him, and doubted the issue of the famous mining operations then being made in Missouri, under the authority of the grant to Crozet.

8. The fall of Canada, in 1763, opened the path of enterprise for the English colonies towards the West, and brought several adventurers into the field, who were

[1] The account of the purported voyage from Fort Crevecœur, on the Illinois, to Michillimackinac, page 135, 137, recognises the ordinary land-marks, mostly by existing names, and contains but few improbabilities; yet the observer who could state that there are no "banks of sand," at *de lours qui dort*, could never have passed that marked coast.

actuated by higher motives than those of mere trade with the native tribes. Carver was the only one of the number, known to us by their publications, who pushed his travels into the upper Mississippi. This man has been underrated. He had formed the bold design of crossing the continent to the shores of the Pacific, which he supposed he could do by the head-waters of the Mississippi. He reached Michillimackinac-on-the-main in the summer of 1766, and thence proceeded, on the 3d of September, to Green Bay, and, by the old French route of the Fox and Wisconsin valleys, to Prairie du Chien. At this place the traders with whom he had travelled took up their wintering posts. He then purchased a canoe, and with two men, a Canadian and a Mohawk, proceeded to ascend the river — reached the falls of St. Anthony on the 17th of November, and ascended, as he adds, above that point to the river St. Francis, — being the precise spot that Hennepin had reached in the time of La Salle. This was the terminus of his voyage. He did not, therefore, extend the area of discovery towards the north, in that direction, although his subsequent exploration of the St. Peters, and the north shores of Lake Superior, place his name among the number of those who have enlarged the boundaries of American geography.

9. Carver had either misjudged the difficulties of so serious an enterprise as an overland journey across the continent, or the means he had for its accomplishment,— probably both objects: for we find him, in July of the next year, wending his way back to the seaboard, by the way of Lake Superior. He then went to London to advocate his plan of discovery, and having been disappointed in his interviews with official persons, turned to the booksellers with the manuscript of his travels. Discredit has been thrown upon his volume, partly from the introduction of some injudicious matter in that portion of it which consists of his own personal narrative, extending from the 11th to the 114th page, (Phil. ed. A. D. 1796,) but, chiefly, from the compiled account of the manners and customs of the Indians, which is clearly taken from the works of Charlevoix, Adair, La Hontan, and other authors, without apprising the reader of these sources of information, and without a discriminating judgment in the selection and re-production of the matter. If I have been correctly informed, Carver had very little agency in bringing forward the superadded matter, which the booksellers, owning his personal narrative, found it necessary to have prepared in order to swell the size of his volume, and arrest the public eye.[1] Carver, as is known, did not survive his repeated disappointments, but died in London, as it is asserted, in great want.

10. Carver was the only colonial traveller who ventured into the area of the upper Mississippi, Adair and others having been located, or having passed their itinerating voyages in other parts of the immense frontiers. The name of OREGON, of which the

[1] Verbal communication of the late Elkanah Watson, Esq., of Albany, N. Y.

origin is uncertain, first appears in the volume of this traveller, and we trace to him the apparently misinterpreted name of Rum River—an important stream originating in a great lake, called *Mille Lac* by the French, lying west of the head of Lake Superior. This stream comes in, on the left or east bank of the Mississippi, above the Falls of St. Anthony.

11. Pike's expedition is the next in the order of discovery. The acquisition of Louisiana, in 1803, had rendered it an object of just interest to the government to ascertain its utmost boundaries, and true geographical extent and character; and the necessary instructions for exploring the Great River of the West, now called Columbia, extending to the Pacific Ocean, were confided to General Wilkinson, and executed by Lewis and Clark. Lieutenant Pike, who was selected to trace up the Mississippi to its source, left St. Louis on the 9th of August, 1805—full two months too late in the year, to reach its source before the season of intensest cold. He reached the Falls of St. Anthony on the 26th of September, where he determined the river to sink its level fifty-eight feet in two hundred and sixty poles, with a perpendicular plunge of sixteen and a half feet. Passing the St. Francis, the utmost point reached by his predecessors in discovery, he urged his barges up the numerous rapids, with great toil, *to* and *above* the falls of the Painted Rock—a distance of two hundred and thirty-three and a half miles above St. Anthony's Falls, and six hundred above the junction of the Wisconsin, as estimated from day to day by himself. (Pike's Expd. App. 1, p. 26.) This point he reached on the 16th of October. A change in the weather now occurred—snow began to fall—ice had commenced running, and the temperature of the water became so reduced that his men could not endure the continued labor of dragging the boats up the rapids; he therefore determined to build a small stockade at this point, and leaving his heavy baggage and part of his men in charge of a trusty non-commissioned officer, to proceed in the ascent on foot.

12. By the 10th of December he had finished his block-houses, and replenished them with provisions by hunting, and having built sleds to be drawn by hand, took a part of his men and moved forward. He reached Sandy Lake on the 8th January, 1806, and Leech Lake on the 1st February following. The ice had now firmly sealed up the streams, lakes, and savannahs, which proved advantageous to his progress, by enabling him to take short cuts across the country. The snow, which had begun to fall about the middle of October, appears to have spread equally over the surface, and is not complained of on the score of its depth, while it permitted the sleds to be drawn. He found the factors of the North-west Company in possession of the whole country. They had ample stockades at Sandy Lake and Leech Lake, and occupied the minor trading posts with subordinate buildings. He states that they sent out annually into different parts forty *outfits*, or separate trading canoes, and employed one hundred and nine accountants, clerks, interpreters, and canoe-men, exclusive of their families. By their agency, two hundred and thirty-three packs of furs and

peltries, including the returns of the "X. Y. Company," and some other posts, were gathered from the Indians. He estimates the duties on the goods and wares brought into the United States in this quarter, and traded illegally, at thirteen thousand dollars per annum. Acting under the apprehension of a seizure of the peltries in store, (one hundred and fifteen packs,) and led by feelings of enlightened hospitality, he received every attention from the agents in charge at Sandy Lake and Leech Lake. On the 12th of February, the factors at the latter post went with him in a *train de glis*, drawn by dogs, to Upper Red Cedar Lake—a distance estimated on the portage route, at thirty miles, where he remained over night, and the next day, and he returned to Leech Lake on the 14th. This constituted the terminal point of his expedition.

13. Pike's expedition served to give us the first notions of that remote part, of what was then called Upper Louisiana—its general topography and resources. He writes to Gen. Wilkinson on his return, that he had travelled seven hundred miles on foot; that six months out of the nine, while he was in the country above St. Anthony's Falls, snow covered the ground, which forbade minuteness of observation on its natural history, had he been ever so competent to this branch; and that the cold was often so severe as to freeze the ink in his pen, while recording his notes. He took observations for latitude at the mouth of Turtle River on Upper Red Cedar Lake, which he places in 47° 42′ 40″ being but 17′ 17″ north of the true latitude, as subsequently determined by Mr. Nicolet, in 1846. He speaks of this lake as "the upper source of the Mississippi," and observes of Leech Lake, that "this is rather considered the *main* source, although the Winnipeque branch is navigable the greatest distance." (Pike's Exp., App. Part I., page 56, Philada. ed. 1810.)

14. Geographers consider that branch of a river its true source, which draws its waters from the point most remote from its mouth. In this view, neither the Leech Lake,—which is, however, the largest mass of water tributary on that plateau or formation,—nor Upper Red Cedar Lake, which is a mere expansion of the Mississippi, can, by any means, be deemed the source of this celebrated stream, consistently with our present information. But the servants of the North-west Company, who were assiduous in their attentions to Lieutenant Pike, while they offered to facilitate his minor trips of exploration from Sandy Lake to Leech Lake, and Upper Red Cedar Lake, were content to let him depart with as precise a compliance with his requests as the nature of these permitted, without attempting to enlarge voluntarily the cycle of his knowledge of the general topographical and statistical features of the country at large. Whether policy or some other motive dictated this, it is certain that these agents of a foreign power did not lay before him—what they, as intelligent men, should certainly have known—the actual point or points from which this river draws its primary waters.

15. They gave him the Turtle Portage, as the ultimate source;—a summit little exceeding forty miles north of the north-eastern shores of Upper Red Cedar Lake.

At the same time, they concurred in the opinion of Mr. Thompson, an astronomer formerly employed by the North-west Company, that the national boundary, to be drawn west from the Lake of the Woods, would intersect the Mississippi; an old idea, founded on the delineations of Mitchell's map, which it appears was employed at the time of the definitive treaty of 1783, but which Lieutenant Pike felt no disposition, however, to concur in, although he was not apprised of the influx of the Mississippi proper into the west end of Upper Red Cedar Lake, from a summit which is now known to be nearly an entire degree *south* of that point, and by a channel but little short of two hundred miles.

16. Pike set out from Leech Lake on his return, on the 18th of February, 1806; and rejoined his party in the fortified camp at Pine Creek, below Elk River, on the west banks of the Mississippi, on the 5th of March. The river began to open on the 4th of April, and he was able to set sail, down stream, in his largest perogue, on the 7th of that month. Floating on the spring tides, he was impelled forward with extraordinary velocity, and reached Prairie du Chien on the 18th of April, and finally returned to St. Louis, on the 30th of April, 1806, after an absence of eight months and twenty-two days; of which the greater part was passed above St. Anthony's Falls.

17. The spirit of discovery now paused for twelve years. In the early part of 1820, the Executive of Michigan Territory, at Detroit, General Lewis Cass, transmitted a memorial to the government, suggesting the continuation of the discovery at the point previously dropped. An expedition was organised in the spring of that year, under this recommendation, which embraced a survey of the natural history and resources of the country, as well as its topography and Indian population. It passed through the series of the upper lakes, tracing their shores,—devoting special attention to the development of copper ores on the shores of Lake Superior. Leaving that lake at its extreme western head, it ascended the St. Louis river to its highest navigable point, and made an overland journey across the summit separating it from the Mississippi Valley, reaching the waters of the latter at Sandy Lake. At this point the trading fort of the North-west Company, mentioned by Lieut. Pike, was found; but it had in the meantime passed out of the hands of that company *four years previously*, having, together with all the posts of the region, been purchased in 1816, from the proprietors, at Montreal, by Mr. John Jacob Astor. This individual organized a new copartnership under the name of the American Fur Company. A law of Congress of the same year, excluded foreign traders from the business, which led him to make exertions to obtain American citizens to take out his licenses, and cover the trade; without any marked success, however, in this respect, for many years. Men who had grown grey in the service of a foreign company, who had been born and bred under another allegiance, but who were expert traders, felt but small interest in remodelling the political feelings and general relations of the Indian tribes, and

changing their fealty from a government which they had ever heard extolled, and which they admired as a model of strength and magnanimity, to one which they regarded as rather antagonistical to all this. This second display of the national flag, therefore, in that remote quarter, with a renewal of the efforts to produce a permanent peace between the Sioux and Chippewa tribes, and a manifestation of the ability of the American government both to *claim* its rights, and *exert* its power over the country, had a decided effect upon the aborigines. And from this era we may date the establishment of American supremacy and a favorable state of feeling in that quarter. Katawabeda, Frezzie, Guele Plat, and other leading chiefs, who had attended Pike's councils twelve years before, were still alive. These were chiefs in the height of their influence.

18. Governor Cass, who led this expedition, determined to make the depôt of his heavy supplies, and leave his military escort, with part of his French canoe-men, at the post of Sandy Lake, and proceed with light canoes, and a select party, to ascend the river. Considering his initial point to be Sandy Lake, he was now at an estimated distance of about two hundred miles above the site of Pike's wintering grounds in 1805–6. It was the month of July — the face of the country exhibited its summer aspect, spotted, as it is, with almost innumerable lakes, savannahs, and rice lands; and it was hoped the waters of the higher summits, or plateaux, were still sufficient to permit navigation to its farthest source.

19. The élite party selected for the ascent embarked in canoes of good capacity at Sandy Lake, on the 17th of July. Two days' diligent ascent brought them to the Falls of Puckagama; so called by the Chippewas, from the portage which it is necessary to make across an elbow of land formed by the passage of the river through a formation of quartzy sand rock. In this passage the river is much compressed, twists greatly in its channel, and rushes with a foaming velocity, without a perpendicular fall. It forms, however, an absolute bar to the navigation. Above this point spreads the Leech Lake level or summit. This summit abounds in extensive savannahs, rice fields, and open lakes, and which are interlaced, as it were, with passages that may be navigated by canoes most of the season. The party passed the Leech Lake fork or inlet on the third day from Sandy Lake; and having the next day entered Little Lake Winnipec — an expanse of the channel — again entered the river, and pursued it to Upper Red Cedar Lake, which the party entered on the 21st of August. They encamped on the west side of the mouth of Turtle River. This constituted the terminus of the voyage. On their return route the party descended the Mississippi, by the way of St. Anthony's Falls, to the mouth of the Wisconsin, and by the Wisconsin and Fox valleys to Green Bay, Chicago, and the lakes, the shores of which were topographically traced.

20. By this second expedition of the government to determine the sources of the Mississippi, the channel was first traced from Pike's Stockade, at the falls of the

Painted Rock, to Upper Red Cedar Lake, or Cass Lake, so named to prevent its being confounded with another Red Cedar Lake below Sandy Lake. The shores of Lakes Huron, Michigan, and Superior, were topographically traced by Captain Douglas, an engineer officer from West Point Academy, together with the valleys of the rivers St. Louis and Savannah, which form the connecting link of communication between Lake Superior and Sandy Lake of the upper Mississippi. It revealed the geological and mineral structure of the basin of Lake Superior; the vast diluvial plains resting on primitive and volcanic rock, on the source of the Mississippi, and the broad northern terminal edges of the great carboniferous and magnesian limestones of the Mississippi Valley.

21. Geographers still felt that the actual source of the Mississippi was not determined. The Chippewa bands at Cass Lake, described the river as flowing in, on the south-west end of that lake, in a volume not inferior in width to its outlet. They reported it as expanding into numerous lakes, with many falls, and severe rapids, over which the river descended from higher levels. They affirmed its actual origin to be a sheet of water called by the French *Lac la Biche*—that is, Elk Lake; lying in or amidst chains of hills which separate its waters from those flowing north, into the great basin of Lake Winnipec of Hudson Bay.

22. In 1823, the United States determined to carry out this exploration of its northern domains. Major S. H. Long, U. S. A., entered and ascended the St. Peters; passing from its head-waters to the Red River of the North, which he pursued to its mouth in Great Lake Winnipec; traversed the southern shores of that lake to the outlet of the Lake of the Woods, and thence by the Rainy Lake route and Fort William, on the northern shores of Lake Superior, proceeded to the Sault Ste. Marie. A long line of the extreme northern frontiers of the Union was thus laid open and described.

23. A Mr. Beltrami, who had attached himself to Major Long's party, left him at the Scottish settlement of Lord Selkirk, about Fort Douglas, or Kildunnan, on Red River, and took his way back up the Red Lake River into Red Lake, and thence by the usual traders' route, across the summit of Turtle Portage to Turtle River, and down this stream to its inlet into Cass Lake,—at the very point where the expedition of 1820 had terminated its explorations. Mr. Beltrami, whose volume, in many respects, is worthless, and replete with descriptions not to be relied on, must, however, be regarded as the earliest author who has described the Turtle River route. He named a lake at the head of this river, Julia; apparently, that he might denominate this the *Julian source of the Mississippi.*

24. The next eight years complicated our Indian affairs on that frontier. In 1831, the government directed the author to visit the Chippewa and Sioux bands, occupying the area of the valley of the Upper Mississippi, with the view of arresting the long-continued feuds of these two tribes, which were then newly broken out, and restoring

peace on the frontiers. It provided a military escort, under Lieutenant R. Clary. I left the basin of Lake Superior at Chegoimegon, or La Pointe, and ascended the river called *Mushkego* by the natives, and *Mauvais* by the French, to the summit which divides it from the waters flowing into the Mississippi River. The ascent was difficult, and the waters low. By a series of portages, and intersecting lakes, I carried my baggage and canoes to the *Namakágon* branch of the St. Croix, and descended the latter to Yellow River. The state of the war which it was sought to allay between the Chippewas and Sioux, led me to reascend the St. Croix and the Namakágon, and from the banks of the latter to cross the portage to Ottowa Lake,—one of the sources of Chippewa River. Thence I descended the outlet of this lake to Lake Chetac, the source of the Red Cedar or Folleavoine branch of the Chippewa, and went down this branch to the main Chippewa and to the Mississippi. The latter was then descended to the mouth of the Wisconsin, and thence I returned by the Wisconsin and Fox Valleys to Green Bay, Michillimackinac, and St. Mary's. In this expedition the valleys of the Maskigo, the Namakágon, the Upper St. Croix, the Chippewa, and the Folleavoine, were explored.

25. The following year, the Sauks and Foxes, under Black Hawk, commenced hostilities against the United States by murdering their Agent, Mr. St. Vrain, and falling unawares upon the citizens. This outbreak, which was, early in the year, unknown to, but suspected by the government, furnished an additional motive for continuing the efforts commenced the prior year, to preserve peace among the northern tribes. Congress had also, in the mean time, passed an act for vaccinating the Indians; and this duty was grafted, by new instructions, on the original plan. These instructions also embraced the topic of amendments of the laws regulating trade and intercourse on the frontiers, the state and prospects of the tribes, their numbers and location, and the statistics of the country generally. The party embraced a physician and naturalist (the late Dr. Douglas Houghton), a small detachment of infantry, under the command of Lieutenant James Allen, U. S. A., who took cognizance of the topography, and it was provided with the usual aid of guides, interpreters, and Canadian canoe-men, necessary in such labors. Going north to the head-waters of the Mississippi, by the Lake Superior Basin and the St. Louis River, it reached the utmost point of the prior discoveries of Lieutenant Pike and General Cass,—that is to say, Upper Red Cedar or Cass Lake,—on the 9th of July, 1832; having made the ascent from Sandy Lake trading house in five days. The Mississippi, at the outlet of this lake, was found to be 172 feet wide, by measurement, and to have an estimated depth of 8 feet. It had previously been observed to be 318 feet at the influx of Sandy Lake.

26. An approximation only to the comparative volume of a river, can be made by mere admeasurements, without regarding, with great minuteness, the various depths of the channel; but such approximations increase our knowledge of the relative volume of remote streams, but little known. If the above data be regarded in this light, they

weaken the opinion of Lieutenant Pike, that the Leech Lake branch contributed the greatest body of water; although the Itascan—called by him the "Winnipique branch"—drew its waters from the remotest point. It is shown that Leech Lake, and the entire volume of water added to it by eleven tributaries between its mouth and Sandy Lake, have not duplicated the volume of water as determined by width.

27. I encamped my party, and made my depôt on a large island which stands in the central area of the lake, (See Plate 41,) where the Indians have gardens, and have cultivated Indian corn from the earliest known period. I could not learn that the time of the introduction of this grain was known to the Indian traditions at that point. Having found here the last fixed village of Chippewas in the ascent of the Mississippi, or between it and Red Lake, north of its sources, and finished my official business, I determined to trace up the river to its actual source. The water was found favorable; although the rapids were represented as very numerous and formidable, and wholly impracticable for canoes of the large size I travelled in. I procured smaller ones, such as the Indians hunt in; and seating myself in one, and each of the four gentlemen of my party in a separate one, proceeded the next morning to make the ascent, with Indian maps of bark, and Indian guides. As I have described this journey in detail, in a volume published in 1834, with maps,[1] it will only be necessary to say that the effort proved successful. A sketch may, however, be given.

28. I left my encampment on the island at four o'clock, A. M., on the 10th of July, in five small hunting canoes, each having an Indian and a Canadian in its bow and stern; the whole being under the guidance of the chief of the village, *Ozawundib*, or the Yellow Head. I took the chief into my canoe, with the mess-basket, oil-cloth, kettle and axe. Lieut. Allen had charge of the canoe-compass, and the other paraphernalia of the topographical department. Dr. Houghton put his plant-press beside him, and my interpreter, Mr. Johnston, and the Rev. Mr. Boutwell, a missionary in the service of the A. B. C. F. M., each occupied separate canoes. It required skill, indeed, even for a practised man, to sit in so ticklish a vessel, and in so confined a space. We moved forward rapidly, whenever the water would permit. An hour's working with paddles, brought us near to the end of the lake, where, to avoid a very serpentine course of the river, we made a portage of fifty yards, from the shores of the lake into the river above. We passed, in a short distance, two small lakes, being expansions of the river. Numerous severe rapids were encountered. Up some of these, the men dragged our canoes. Partly in this way, and partly by the force of paddles, we pressed on, step by step, and at last reached the summit of the *Pemidjigumaug*, or Cross-water Lake, at the computed distance of forty-five miles above Cass Lake. This was the first essay.

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[1] Narrative of an Expedition through the Upper Mississippi to Itasca Lake. New York, Harpers, 1834

29. The Cross-water Lake, called *Traverse* by the French, is, in every feature, a beautiful sheet of clear water, some ten or a dozen miles in length. It lies on the same summit as Turtle Lake, which has been so long and so improperly reputed as the source of the Mississippi. The elevation of the Cross-water, or Permidjguma, has been determined by barometrical observation at fifty-two feet above Cass Lake.[1] It is a point which may be noted in the topography of this stream, as its most extreme extension of north latitude; all its waters above this lake, being from sources south or south-west of this parallel. Its most southerly point is put, in Mr. Nicolet's tables, in lat. 47° 28′ 46″.

30. Half a mile above this we entered a lake, to which the name of Washington Irving was given. This lake might be deemed a re-expansion of the Cross-water, were it not separated from it by a narrow strait, or channel, having a perceptible current. About four miles higher, the Mississippi is marked by the junction of its primary forks, both of which originate in the elevated heights of the *Hauteur des Terres*. The right hand, or largest branch, originates in Itasca Lake. I took the other branch, or Plantagenet source, as having fewer rapids and minor falls to surmount. It was soon found to expand into a small lake, called Marquette; and a little higher, into another lake, called La Salle. A few miles above the latter, we entered the more considerable expanse of the Kubbekaning, at the head of which we encamped, at a late hour, in a drizzling rain, and amidst a forest of spruce and larch, which had quite a spectral look, from the thick depending mosses which hung from branch to branch.

31. We left this dreary camp as early the next morning (the 11th) as the heavy fog and murky air would permit, and pursued our course—a very serpentine channel; the stream winding its way through savannahs, and re-doubling in its course, with scarcely a perceptible current. These boggy grounds were narrow, and bounded by a forest of stunted grey pines and tamaracks, festooned with moss. Clumps of alder and willows fringed the banks. Vegetation had an Alpine character. We frequently disturbed water-fowl in the passage, and observed deer on the shore; one of the latter was shot by OZAWUNDIB. The stream appeared to be nearly on a dead level. Styx could not have been less attractive. Towards evening we passed the *Naiwa*, or Copper-headed-snake River, a tributary coming in on the left bank. Soon after this, we encountered rapids, and some minor falls. The guide stopped at the foot of a high hill of drift pebbles and sand. Up this we scrambled. Canoes and baggage followed. We made a portage across a peninsula, and struck the stream again above the falls; where we encamped, wearied with a long day's little incidents.

32. On the third day's journey we came, at an early hour, to Assowa Lake, which we passed, under paddles, in twenty minutes. On reaching its head, Ozawundib pushed my canoe into a marshy inlet covered with pond lilies and other aquatic

[1] Nicolet.

Drawn by Capt. S.E. Eastman, U.S.A. from a sketch by H.R. Schoolcraft.

Pl. 42.

Engraved by James Smillie.

ITASCA LAKE.

Source of the Mississippi. 1575 feet above the Gulf of Mexico.

plants. He urged it as far as possible towards the dry ground, and stopped. We had reached the terminal point of this branch. We were in a perfect morass. Here the portage to Itasca Lake began, across the *Hauteur des Terres*. No tract on the whole route presented so severe a toil. We were continually mounting acclivities, or descending into gulfs. Geologically, this elevation consists of hills of the diluvial or erratic block group, disposed in ancient dune-shaped ridges. Pines, of several species, are dispersed over it. The depressions or depths between these have served as repositories for accumulated vegetable matter. These gulfs are sometimes boggy: more often they contain small lakes or ponds. The pines exhibit parasitic grey moss. We saw the passenger pigeon, and one or two species of the hawk family. It was a hot July day. Our hardy canoe-men set down their burdens many times on the route. We passed it in thirteen rests, or *opugidjiwunun*, as the Chippewas term it—which, in estimating the actual distance, gives this elevation a breadth of about six miles. We found the strawberry ripe. We saw frequent tracks of the red, or common Virginia deer. Beneath the tread, we had evidences of oceanic action, in the abraded boulders and pebble stones of both the primary and sedimentary species of rocks. It seemed that northern oceans must once have rolled over this region. We were evidently passing over a soil which had been reproduced from broken-down strata; and although a species of marine sand capped the heights, it was clear, from the small lakes and numerous springs, that an aluminous basis was present at no great depth below. I felt too much interest in beholding the source of so celebrated a river, to permit my lagging behind as we approached the object. My share of the baggage consisted of little besides a spy-glass and portfolio; and during the last stage of the portage, I kept up with the chief, and passed him in the descent of the last ridge, which brought me first to the goal. It was the 13th of July—a clear and calm day, and the lake spread, as far as the eye could see, like a mirror, resting in a basin crowned with picturesque hills. The view was wholly sylvan; some elms and other deciduous species lined the shores. As soon as the baggage and canoes came up, we embarked, passed through the lake, and encamped on an island near its central point, where the two arms of which the lake consists, unite. The accompanying view (Plate 42) is taken from the shore abreast of this island.

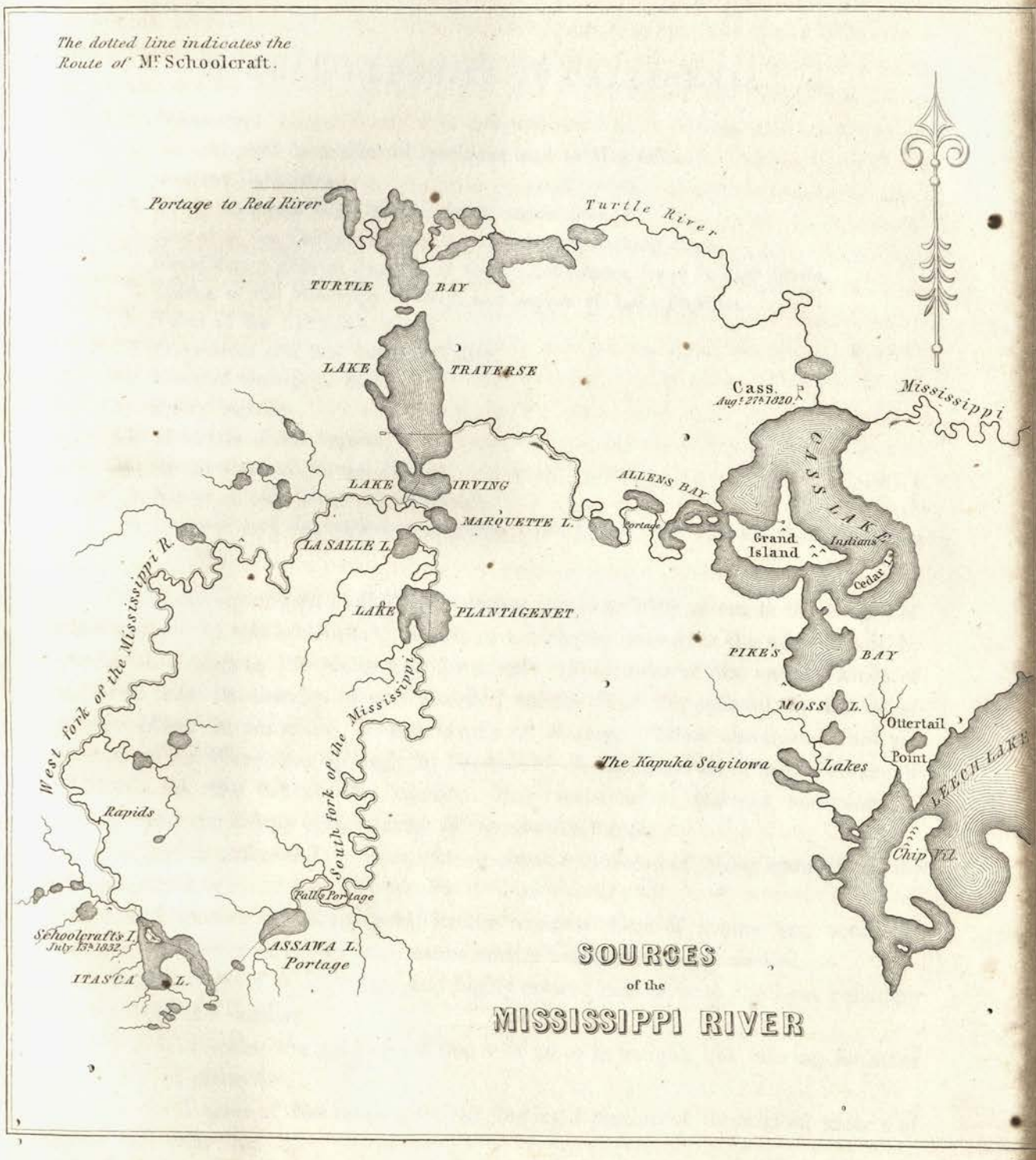
33. Itasca Lake, to which the river has thus been traced, has its origin wholly in springs and small streams of pure water, which issue from the sandy elevations embracing it. From a mean of two published estimates of distances, it may be put at three thousand and twenty-five miles from the Gulf. Its altitude above the Atlantic was estimated at the time at fourteen hundred and ninety feet; assuming, as a basis for this, my prior estimate of Cass Lake, made during the expedition of 1820, at thirteen hundred and thirty feet, and the elevation of Itasca Lake above Cass Lake at one hundred and sixty feet.

34. Having finished the necessary observations at Itasca Lake, and taken specimens

of whatever could be found in its natural history, and cut some canes, I embarked on my return down the Itasca branch, and without serious accident, rejoined my encampment in a few days, at Cass Lake. Lieutenant J. Allen, the officer in charge of the topography, who furnished the elements of the annexed map, (Plate 41,) estimated the distance at two hundred and ninety miles, of which one hundred and twenty-five miles were up the Plantagenet, and one hundred and sixty-five down the Itasca branch.

35. The natural history of Itasca Lake was left in the hands of Dr. Houghton; whose subsequent lamented death in the geological survey of Lake Superior, has, it is feared, deprived the public of many interesting and valuable observations. He noticed, among other plants on the island, the *microstylis ophiog, lossoides, physalis lanceolata,* and *silene antirrhina.* The elm, pine, spruce, and wild cherry, were also noticed. I picked up, on its sandy shores, the small *planorbis companulatus.* There was no rock in place. Among the pebbles of mixed primitive and sedimentary boulders, there were some of considerable size. There were the spinal and head bones of some fish, the remains of former feasting, at a deserted Indian camp, which is the only evidence known of the lake's yielding fish. There were also shells or bucklers of a species of large tortoise. We saw a fine deer, drinking at the margin of the lake. The water was pure, deep, and cold; and reflected, at the depth of several feet, a clean, pebbly, and sandy bottom. The topographical observations of Lieutenant Allen estimate its extreme length at seven miles.

36. Four years afterwards,—namely, in 1836,—Mr. J. J. Nicolet, who was under instructions from the United States Topographical Bureau, (Colonel J. J. Abert,) visited this lake. He reached it on the 29th of August, and we are indebted to him for several valuable scientific contributions. He determined its latitude, at the island, to be 47° 13′ 35″. The highest observed point of the *Hauteur des Terres,* he puts at 130 feet above the lake. His report, communicated to Congress after his death, by Colonel Abert, is a document of high value. Barometrical observations made by him make the extreme altitude of Itasca Lake, above the Gulf of Mexico, to be 1575 feet. The same observer found the apex of the *Hauteur des Terres* to be 1680 feet above the Gulf; a very inconsiderable altitude, if we consider it as the continental elevation between the West Indies and the Northern Seas.


The dotted line indicates the Route of Mr Schoolcraft.
Portage to Red River
Turtle River
TURTLE BAY
LAKE TRAVERSE
Cass
Aug! 27th 1820
Mississippi
CASS LAKE
ALLENS BAY
LAKE IRVING
MARQUETTE L.
Portage
Grand Island
Indians
Cedar I.
LA SALLE L.
LAKE PLANTAGENET
PIKE'S BAY
MOSS L.
Ottertail Point
The Kapuka Sagitowa Lakes
LEECH LAKE
Chip I.
West fork of the Mississippi R.
South fork of the Mississippi
Rapids
Falls Portage
Schoolcrafts I.
July 13th 1832
ASSAWA L.
Portage
ITASCA L.
SOURCES
of the
MISSISSIPPI RIVER

B. GOLD DEPOSITS OF CALIFORNIA.

1. Discovery.
2. Mineralogical description of specimens sent to War-Office.
3. Ancient Gold Mines.
4. South American Gold Mines—large masses found.
5. Extent of the California deposits, and plan of working them.
6. Metalliferous diluvial deposits of the United States found in high levels.
7. Galena of the Mississippi Valley, and copper of Lake Superior.
8. Value of the California Mines.
9. Sacramento and San Joaquin Valley.
10. Want of Geological date.
11. Sierra Nevada.
12. Character of the deposit.
13. Observations of Colonel Mason.
14. Extent of this mineral development.
15. Probability of the original veins being found in the more elevated slate and quartz rocks.

1. THE discovery of gold in California makes the year 1848 an era in the history of that country. It was accidentally found, in the Spring season, in the diluvial soil, by some persons digging the sluice-way for a mill. Specimens of the various kinds of the metal and its matrix, were forwarded to the War Department by the chief military officer in command, in the month of August. These specimens were not received at the War-Office till early in December. I examined them in the library of that office, on the 8th of that month. They consisted of thirteen specimens of various minerals, chiefly gold in some of its metallic forms.

2. Judged by external character, the specimens admitted of being grouped in the following manner:

A. Small masses of native gold, in the separate form of grains and scales, or minute plates, from which all extraneous matter had been cleanly washed.

B. Similar forms of equally fine, and highly colored masses, with the loose residuary iron sand of the washer.

C. Masses of scale-form gold of an ounce or more in weight, but offering no other peculiarity of character.

D. An ovate mass of two ounces weight, having a portion of its original matrix of quartz still adhering.

All the scale-form, and lump gold, exhibits, more or less distinctly, the marks of attrition, and of having been carried in its alluvial association in the valley of the

American fork of the Sacramento, some distance from its original position. It is of the sub-species of gold—yellow native gold of the systems—the *Gold-gelber Gediegen Gold*, of Werner. The specific gravity of this variety, in its refined state, is generally from 17,000 to 19,000. By analysis, it is sometimes found to contain very minute portions of silver and copper.[1]

The preceding notices embrace all the specimens of native gold in the thirteen separate packages received at the War-Office, exclusive of the caddy, named in Colonel Mason's report. The following comprise the other mineralogical species sent.

E. Native masses of a metal of a light steel grey color, approaching to white, of considerable weight. These are scale-form; resembling in this, and in size, the scale or plate gold. They present the peculiar color of *platina*, which it is difficult, however, to distinguish from palladium. The specific gravity of native platina varies between 15,601 and 18,947, but reaches, in its original state, 23,000.[2]

F. Angular masses of a white mineral, of a dull metallic lustre and coarse granular fracture, which has the external characters of iron pyrites.

G. A lump of red-colored ore. This mass is a large and heavy specimen of the ore of mercury, called *cinnabar*, and is well characterized as the dark red variety of the systems.[3]

H. Arenaceous magnetic ironstone, of its usual form, color, lustre, and specific gravity. This ore is the residium after washing away the alluvial matter from the grain and scale gold, and has been transmitted to denote that fact, and not as attaching any importance to its value.[4]

3. In appreciating the gold formation of California, we may derive some light from

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[1] Analysis at the United States Mint, has determined the value of the gold specimens sent by the Secretary of War, to be, before melting, $18.05\frac{1}{2}$ per ounce, and after refining, $18.50—denoting an extraordinary degree of purity in the native gold.

[2] Platina has been found at only two places in South America; namely, at Choco, in New Grenada, and at Barbacoa, between 2° and 6° north latitude; and this metal has never yet been traced north of the straits of Panama. It is associated with palladium and iridium. It occurs, in these localities, in diluvial soils, along with grains of gold, zircon, spinel quartz and magnetic ironstone. We may expect all these associations to be verified in the deposits of California.

[3] The most important mines of cinnabar now known, are at Almaden, in Spain, which have been worked upwards of two thousand years; at Idria, in Friaul; in the Palatinate; and at Deux Ponts, in Spanish America. The specific gravity of the Almadian ore is 7.786. The word *cinnabar* was anciently applied to the drug called *Dragon's-blood.*

[4] This mineral is distributed widely in the rocks and soils of the United States. It constitutes an element in all the rich alluvions of the Mississippi Valley, and is very abundant on the shores of the upper lakes, where it is driven up by the waves; but being heavier than the silicious sands, it sinks at the water's edge, while the former are winnowed out by the winds, and form banks at higher altitudes. Tons of it together, lie in this pure form, on the banks of Lake Superior.

the history of the discovery of this mineral in other quarters of the globe. Much of the native gold of Asia, Africa and Europe, of ancient periods, was found in earthy deposits in the beds or valleys of streams, or plains which have been produced from the disintegration, gradual degradation, or removal of pre-existing rocks. The early sources of gold bullion, of which the bed of the Pactolus is a memorable example, have been long exhausted. And as the surface gold of later ages has been picked up, or washed out, its origin has been generally traced to fixed veins in contiguous mountains, where the expense of crushing the hard rock has been found to be well-nigh equal to, and sometimes more than, the value of the gold. In other cases there has been a complete exhaustion, as at the Lead-hills in Scotland, where, in the time of Queen Elizabeth, £100,000 sterling was obtained in a few seasons from the alluvial soil. (Jameson.)

4. A very large proportion of the native gold of South America, which has yielded more gold than any other part of the world, is explored in diluvial or disintegrated soil, which is generally found spread out at the foot of mountains or outbursting valleys from table-lands. Such, too, was the position of the Mexican gold, although, at present, it is mined chiefly in quartz veins, in connection with silver and other ores, in mountains of mica-slate and gneiss. It is altogether probable, and would be in accordance with recorded facts in other parts of the world, that such should also be the relative position of the native gold to the original gold-bearing veins in California. The fact of the existence of virgin gold in the plains of that province was not unknown to the Spanish. Humboldt, prior to 1816, mentions that there is a plain of fourteen leagues (forty-two English miles) in extent on the California coast, with an alluvial[1] deposit, in which lumps of gold are dispersed, (vide Nueva Espania.) The same author states that a lump of gold was found in Choco weighing twenty-five pounds, and that another was obtained near La Paz, in Peru, in 1730, which weighed forty-two pounds. He gives the annual produce of the gold mines of the Spanish American colonies at 25,026 pounds Troy. The gold of Brazil is chiefly washed from the sands of rivers and other earthy and unconsolidated deposits, which stretch at the foot of a high chain of mountains running nearly parallel to the coast, from 5° to 30° of south latitude. From this region nearly 30,000 Portuguese marcs of gold are annually exported to Europe, making the annual produce of gold of the gold mines of Spanish and Portuguese America, 45,580 pounds Troy; equal to 9,844,280 American dollars.

5. Whatever be the extent, value, and permanency of the gold distributed in the diluvium or later river deposits of California,—and it cannot be doubted to be relatively valuable, we should adopt, in relation to it, a policy which, while it respects

[1] This term was vaguely applied, at the era, to two distinct classes of phenomena.

the experience of science, and the results of mining and metallurgy in other countries, commends itself to our institutions by its comprehensive and practical features.

6. It is one of the traits of the metalliferous diluvial deposits of the United States, that they spread over extensive areas of surface; that they lie at very considerable elevations above the present water-level of adjacent seas, lakes, and rivers; that they are, as a consequence, free from the general power of action which these waters, in their present state, can exert upon the areas as such; and that the exploration and working of the beds is attended with comparatively little labor or expense, so long as the effort is confined to the soil. It would appear, in contemplating this question of diluvial action, as if it had exerted itself with greater force and violence, and with a more degrading power, upon our high lands and summits than in the old world, so as to demolish the solid surface of rocks, and break them up, to a greater depth, and to scatter their disrupted veins of mineral matter over more extensive districts.

7. Such are the impressions in examining the remarkable diluvial and injected deposits of galena of Missouri, Iowa, and northern Illinois; the gold debris and pebble diluvium of the Appalachian spine in the Southern States; and the wide-spread copper-boulder diluvium of the basin of Lake Superior. In each of these cases the original metal-bearing rocks have been broken down by ancient diluvial action, and scattered over wide areas of country. In each case, also, the first discovery, or eventual working of these extemporaneous mines, was accompanied by a public excitement, hundreds and thousands rushing to the field; and in each case the explorations terminated, after the most extravagant anticipations of easily-got wealth, in tracing the origin and supply of the drift deposits to contiguous veins in the undisturbed rocks.

8. No determinations can be safely made, *à priori*, upon the extent and permanent value of the gold deposits under consideration. Our actual knowledge of the geography and resources of the country is limited. Of its geology and mineralogy, further than conclusions can be guessed at, from the loose letters of the day, and the examination of the specimens which are named above, and the assays of the mint, we know nothing. Its coast latitudes, and the height and distance of its interior positions, are, it is believed, accurately described and fixed, and made accessible, together with a valuable amount of information collected of its vegetable physiology, and military and maritime advantages, by the several officers of the navy and army, who have reported and published the results of their observations.

9. In the geographical memoir accompanying Colonel Frémont's map, communicated to the Senate, in compliance with its resolutions of the 5th and 15th of June last, the Sacramento and San Joacquin Rivers are described as the natural development of one valley, whose waters, rising at opposite extremities, meet in its centre, and unite their channels before reaching tide-water at the head of the Bay of San Francisco. Both rivers are represented as drawing their sources and chief tributaries from the Sierra Nevada chain of mountains, through a wide belt of "foot-hills."

These are covered, to a considerable extent, with large oaks, pines, and some other deciduous and perennial forest-trees, and afford in their valleys and plains extensive and valuable tracts of fertile soil, fit for the purposes of agriculture.

10. There is no description of the range, dip, or geological constitution or character, of the hills and elevations reputed to yield gold; of the soils which rest upon their tops, sides, or valleys; or of the rock formations of higher altitudes; this intrepid and accurate observer, having confined his attention chiefly to the topographical features of the country, and the various phenomena which determine its capacity for supporting animal and vegetable life. It is seen, as an incidental feature of his notes, that the plains of the Sacramento and San Joaquin are covered with the debris and drift soil of higher altitudes, whose deposition may be regarded essentially as the result of diluvial, and not river action. In the present state of our information, we must regard the native gold, scales and lumps, as one of the elements of this reproduced mass. How far they have been transported, is unknown. Whether the beds are deep or shallow, extended or limited, has not been observed. Whether the gold is found in the valleys or depressions exclusively, or also on the hills or plains, is equally unknown. In order to form just conceptions on the subject, it would be desirable also to ascertain whether, if the elevated lands afford gold, it is in the same relative proportion to the soil, gravel, and sand, as in the valleys; whether there are any appearances, in the dry runs or sides of hills, of the loose materials being in the state of a debris, which has not been far removed; or any other indication of the proximity of fixed veins.

11. It is known from the history of the earliest discovery of gold, that volcanic rocks, certainly lavas and the newer formations, never yield it; and it cannot, therefore, be supposed to come from the vitreous peaks and eminences of the Sierra Nevada. This bold mountain chain, which, under several names, extends along the Pacific coast, from Mount Elias to the Gulf of California, has probably lifted up, on its western sides, the granites, clay-slates, mica-slates, clay-porphyries, and other strata, whose detritus and comminuted fragments are found in the Valley of the Sacramento, in the shape of pebbles and sands. Such, at least, in the absence of all observation, may be presumed to be the true position of these gold deposits. Colonel Frémont, in approaching that part of the Sacramento which is now the theatre of gold washings, observed "a yellowish, gravelly soil" along its eastern banks. (Geog. Mem., p. 23.) He is speaking of the permanent upland soil, which he states to be 560 feet above the level of the sea, and high above the influence of the floods of the rainy season. Here, then, is evidence of the diluvial character of the general soil, and of its origin in higher positions. Mount Tsashtl, which is stated by him to divide the lower from the upper Valley of the Sacramento, is placed by that observer at 14,000 feet above the sea; which is nearly the height of Mont Blanc. (Geo. Mem., p. 25.) This stream, he observes, falls not less than 2000 feet in twenty miles, in passing, at the base of

this mountain, from its upper to its lower Valley. This denotes a marked altitude for all its eastern tributaries which flow immediately from the foot of the continuous line of the Sierra Nevada. Many of these tributaries are nearly dry, except in the rainy season, when they are swelled to torrents, which must exert a powerful action upon the loose materials of their beds.

12. Here we perceive another class of phenomena, which may materially affect the value, position, and permanence of the California gold deposits. The whole weight of the popular testimony derived from letters,—a species of testimony which, in this feature, may be admitted,—is in favor of the position of the metal in the transported soil; nothing but bars, shovels, and pickaxes being necessary to pursue the search. There is no affirmation that any person is pursuing a rock-vein, or has employed a blast. There is some reason to believe that the scale gold is of the oldest era, and that it has been transported the longest distance from its original veins. These minuter pieces approximate, in this respect, to the dust gold of the African coast, which has been found along the low, sandy, alluvial shores of that country, for the space of 130 leagues, at very great distances below the interior high lands, and without, so far as is known, ever having been traced to its original beds. Were the degraded inhabitants of that coast required to be paid but a moderate per diem for the time they devote in its search, and filling it in the quills of birds to be offered to traders and mariners on the coast, it is not probable that the commerce or circulating medium of the world would be enriched thereby another aroba.

13. There is but one further source of testimony respecting the value and position of these beds, which does not differ, however, in the general view it presents, from the preceding. Colonel R. B. Mason, in his report of the 17th of August last,—that is to say, about three months after the first discovery of gold on the Rio de los Americanos,—visited that location, and describes the position of the gold deposit as constituting "the bank close by the stream." The sides of the hills were covered with tents and bush arbors. This deposit, as witnessed in the washings, was made up of "coarse stones," "earthy matter," "gravel," and "gold mixed with a heavy, fine, black sand." This gold "is in fine, bright scales;" being, if the preceding views are well taken, of the oldest era, or the class of deposits in which the gold is farthest removed from its parent bed. In ascending the stream, in its south fork, twenty-five miles higher, he found the country became more broken and mountainous, and covered with the species of pine (*Pinus lambertiana*), the value of which first led to the discovery. He was now at the distance of fifty miles from the confluence of this stream with the Sacramento; and he estimates the hills at "about 1000 feet above the Sacramento Plain." This was the position of the original discovery, which was made in the bottom of the stream, in a newly-washed "bed of mud and gravel," washed out of a mill-race. At a still higher point, on the north banks of the stream among the mountains, in the bed of a dry run, he visited another locality, where

coarser pieces of gold were found. All the gold was found in the beds or on the immediate banks of water-courses, in a gravelly soil. Such deposits had been found to yield gold, whenever examined in "the numerous gullies or ravines that occur in that mountain region." It was invariably "mixed with the washed gravel, or lodged in the crevices of other rocks." None had been found in its matrix in fixed rocks. The country is much broken and intersected in every direction by small streams or ravines, in all which, so far as explored, gold had been found. The circle of the discoveries was every day enlarging. It had then extended north of the Rio de los Americanos to the Bear River, the Yuba, and the los Plumas, or Feather River; from the beds and ravines of which gold was brought by the Indians and by others. It had also extended south to the Cosumnes, a tributary of the San Joaquin.

14. Such is the description of an officer who personally visited the principal theatre of mining operations, who conversed with the persons of chief note concerned in these extemporaneous and precarious searches, and with the operative diggers of every sort, and who has transmitted, as the result of this visit, the several specimens of gold and other minerals herein noticed. About seventy miles from south to north, and fifty miles from west to east — these having been the directions of discovery, were embraced within its extreme points.[1]

15. There is too little known, however, of the geological character, origin, and extent of this deposit to determine the principal points upon which its ultimate value and permanency may turn. Are we to consider the hill-diluvion as the source whence the deposits of gold in the ravines and valleys have been washed by the spontaneous action of the rivers and floods of centuries? If so, it is certain that these rich deposits will be exhausted in a comparatively short period; and the undisturbed elevated tracts of pebble-drift must be relied on to sustain the supply. The proportion of gold this elder stratum may yield will, doubtless, be less than the valley and gully deposits, and may but moderately reward the laborer for his search, if it reward him at all. If, on the contrary, the gorges and valleys which have had their outflow from the disintegrated schists and quartz, and the crystalline and granular rock formations which probably lie at the foot of the Sierra Nevada — an elevation which, agreeably to facts above noticed, is at least two thousand feet above the lower and central waters of the Sacramento, then the search must be extended up and across the valleys, in order that it may terminate in fixed mines. In any view, careful and scientific examinations are necessary to arrive at just conclusions.

DECEMBER, 1848.

[1] Subsequent discoveries, embracing the period up to October, 1850, denote this development of native gold to reach, in its extreme points, not less than one thousand miles, namely, from the Gold Mountain in S. E. California to Oregon.

It appears that the gold is found in valleys of denudation crossing the stratification, and that the deposits, which are by the spring freshets rendered alluvial, are renewed with the freshets of every season. That these will contain less and less gold every season after a period, and finally yield too small a per centage to reward labor, is very probable, and nearly certain. At that period, fixed mining in the gold-yielding strata with quartz veins must commence. The quartz veins and the gold veins will, from recent information, be found one and the same, and their perfect geological identity may be relied on, although no gold may be perceptible to the eye, if present at all, for distances in the range of the veins.

As yet we are without a geological account of the district, which is the reason of this paper being retained, and printed with these materials. Meanwhile, the subject of the Indian claim to remuneration for the territory, is one which should be met on grounds of entire justice and benevolence.

JUNE, 1850.

C. MINERALOGICAL AND GEOGRAPHICAL NOTICES, DENOTING THE VALUE OF ABORIGINAL TERRITORY.

1. Tin on the Kansas River, with a sketch.
2. Wisconsin and Iowa lead ores.
3. Black oxide of copper of Lake Superior.
4. Native silver of the drift stratum of Michigan.
5. Petroleum of the Chickasaw lands.
6. Artesian borings for salt in the Onondaga plateau.
7. Geography of the Genesee country of Western New York.

1. Tin in the Kansas Valley.

The importance of the subject named in the following letters will furnish the best reasons for inserting them. Indicating the existence of so important a metal as Tin, on the waters of the Kansas, they supply a hint for exploring the region in question.

Country of the Potawatomies,
Old Kansas Agency, January 10th, 1848.

Sir: — Permit me herewith to enclose you a specimen of American Tin found in this region of country; the metal from which the Britannia ware of commerce is manufactured.

I have not, at this remote place, for the want of the necessary re-agents, been able to subject it to a rigid analysis, but I believe I have sufficiently tested it to be able to pronounce upon its character, and if so, its discovery is a matter of some interest to our common country. It exists in great abundance, and passes here for Zinc. Let it be tested.

If I recollect my early reading right, the old tin mines of Cornwall, England, furnish the greater part of this metal used in commerce throughout the world. This deposit of tin, I presume, is equal to that. I have had some knowledge of the existence of these mines for more than ten years past. A beautiful specimen of gold was about that time found by my brother-in-law Doctor R. M'Cay, about forty miles north-west of this place, and whatever this country may lack, as to timber, &c., it is one of great interest and value on account of its mineral resources.

Should leisure from the duties of my appointment as physician admit of it, I propose in the spring to furnish your office with a detailed exhibit of its geological aspects and mineralogical indications.

Should you be pleased to acknowledge the receipt of this, please inform me whether the person discovering mines on lands unassigned to the Indians west of the state of Missouri, is entitled to have a lease as on other lands belonging to the United States.

P. S.—The metal enclosed was run from the ore in a common melting pan for lead. J. L.

Sub-Agency of the Potawatomies.
Kanzas River, May 15, 1848.

Sir:—Your favor, desiring that a portion of the ore, from which was smelted the metal sent in my former letter, should be sent through the Superintendent of Indian affairs, arrived too late to enable me to comply with your request. I have not at this time any of the ore on hand, but will procure and send it as soon as practicable. The ore in question has been brought to this place by the Kansas Indians, formerly residing here, and is represented by them to exist in great quantities where obtained by them. From all I can learn from them, they obtain it on the Smoky Hill Fork of this river, about one hundred miles west of this place; but they are so superstitious in regard to such things, that little reliance can be placed on what they state—they have, however, promised to conduct me to the place; whenever I may be able to go. My engagements have been such that I have not as yet found time to do so, and may not this season. As to the existence in this region of an extensive and very valuable deposit of tin ore of a rich quality, I have no doubt. The Kansas blacksmith at this place smelted from the ore, in his forge fire, a quantity sufficient to make a large pipe tomahawk. I had also in my possession ten years since, a block of tin weighing one and a half pounds, smelted in a common log fire.

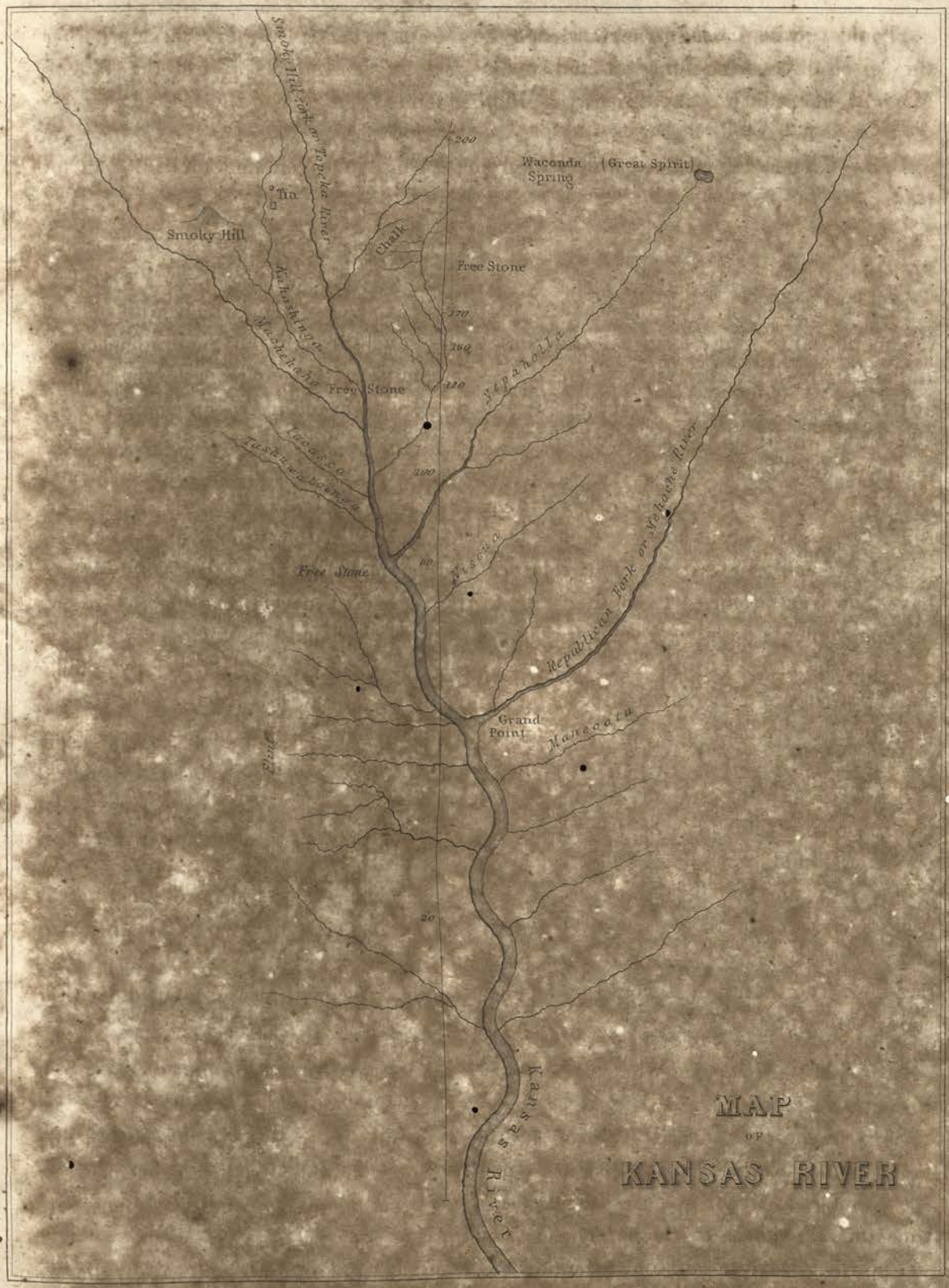
So soon as practicable, I will send you the ore in question, with some other ores now on hand, found immediately here.

I have made but little progress in making up data from which to construct a geological sketch of the country. I cannot command the time. Could I obtain leave of absence from my post for one or two months, in order to ascertain the precise locality of the tin mines, I would make such a tour with great pleasure, but otherwise cannot attempt it.

Pub. M. L. School, Indian Territory,
October 1, 1849.

Sir:—Some time since I transmitted to your office a specimen of American tin found in the Kanzas Valley, and subsequently through the Indian Agent made a special request of your predecessor in office, for a permit to explore and work for a set time this tin mine, to which he made no reply.

I now beg leave to call your attention to the subject. For many years I have been gathering up information respecting this locality of tin metal; and have at length


Smoky Hill fork or Topeka River
Tin
Smoky Hill
Chalk
Waconda Spring
(Great Spirit)
Free Stone
Kahashinga
Machehaha
Free Stone
Nepaholla
Iacasca
Tashuwabonga
Nisoua
Free Stone
Republican Fork or Mehoche River
Grand Point
Manecata
Flint
Kansas River
200
170
160
130
100
80
20
MAP
OF
KANSAS RIVER

satisfactorily ascertained its place. Twelve or fifteen years since, a large block of this metal, smelted from its ore, was submitted to me for examination. More recently the Kansas Indians have brought in the ore; through whom, and by paying for it, they have privately revealed the secret. The rough sketch (Plate 43) herewith submitted, will give you some knowledge of its location. The deposit of metal in the form of an oxyde of tin appears to be immense, perhaps surpassing the old Cornwall mines of England.

Our common country, as you are aware, is almost wholly dependent on foreign countries for its supply of this valuable metal; and its discovery within our reach, and on our own soil, must be regarded as a matter of great interest, by all who seek the well-being of their country. I feel unwilling, after having labored some, and expended something, that this subject should be lost sight of; and I most respectfully beg the favor of you, to lay the request, which, I now repeat, for a permit to work and explore these mines, before the President and proper authorities at Washington, and communicate to me the result. Should it be deemed (for want of authority) inexpedient to grant the request, I will then seek it elsewhere.

The mine is too remote from the state to be visited by single individuals, being immediately within the range of the Pawnee and Camanche war-parties. As you will notice, the locality is on the United States' lands not yet assigned to any of the Indian tribes."

Thus far our informant. It may be well to add, that neither of the three best known species of tin ore can be reduced in an "ordinary smelting-pan." The red oxyde of zinc, discovered in New Jersey, by the late Doctor Bruce, it has been found impracticable to separate from the Franklinite, with which it exists, and we may not unnaturally look for similar difficulties with the reported western locality of the oxyde of tin. The geological sketch, sent by Doctor Lykins, (Plate 43,) indicates a country of sandstones, shell-rocks, &c., which are unfavorable to the discovery of tin-stone, wood-tin, &c. If this metal exists as an oxyde, that fact will probably itself constitute a discovery. We cannot, from what is known in Europe, exactly prescribe its associations in the west — such has been the progress of metallic discoveries here; but the geology of the country, so far as it is known, is adverse to the theory and anticipations expressed.

It may also be well to state that, from the known superstitions of the Indians, the Kanza account cannot be deemed to be free from all suspicion of insincerity, superstition, or gross self-interest. Yet the inquiries of our correspondent are deemed entitled to notice, and if followed up, however the subject be now distorted, may prove the means of mineralogical discoveries of value.

2. Wisconsin and Iowa Lead Ore.

A correspondent, engaged in the practical working of these ores, remarks:—"By the box of specimens transmitted, you will be able to judge of the character of these valuable ores. The square broken mineral is taken from east and west leads; which is of the softest temperature and most easy to smelt; it also produces the most lead,—yielding about 50 per cent. from the log, and about 15 from the ash furnaces.

The dark smooth pieces are taken from deep clay digging in the vicinity of Menomonie River. This mineral is less productive than the other, yielding only from 40 to 45 per cent. It is supposed to contain some silver.

The thin flat pieces—or what is termed sheet mineral—are taken from north and south leads. It is usually found in rocky diggings, where the sheet stands perpendicular, and is struck in sinking from six to ten feet. The sheet varies in its thickness, it being in some places six or eight inches, and at other places not more than one inch thick.

The average yield of the country is from 45 to 58 per cent.; of which the log furnace yields 43, and the ash furnace 15 per cent."

3. Black Oxyde of Copper Ore of Lake Superior.

This valuable ore appears to have pre-existed in the trap-rock veins, which are now occupied so extensively by native copper. The volcanic throes by which it was exposed to the effects of carbon, while these veins were yet in a state of incalescence, may be supposed to have produced the very extraordinary profusion of native copper which marks the rocks of this basin.

In some cases the oxide appears to have been diffused in the rock in small masses, awaiting but the fusion of the whole area of the stratum, in which, on cooling, it assumed the shape of small metallic globules. The Eagle Harbor and Isle Royal Mines are in this condition, and require the whole body of the rock to be crushed, to recover these grains. Very little of the ore is found in its state as an oxide; and when so found, it is associated with carbonates of copper.

Experiments denote its ready reduction and great richness. Trials gave the following results:

A. In a Hessian crucible, luted in the usual way, 1590 grains of the ore, pulverized, were treated with borax, common salt, cream of tartar, rosin, and charcoal. The result was a button of pure copper, of 1134½ grains.

B. Of 1320 grains of the same ore, treated as above,—the flux and carbonaceous matter being in excess, in order to revive the metal and bring out a complete assay,—the trial yielded 949 grains of copper.

C. 2910 grains, treated as before, yielded 2268, and a fraction, grains of metal.

These three assays, yielding respectively 83, 71, and 78 per cent., establish the quality and value of the ore as exceeding all others of this class of metal known in Europe or America. The specimens were all obtained on the main shore, opposite the *Verde Roche*, at Copper Harbor, in 1826.

The green carbonate, from the same locality, yielded but 6¾ per cent.; which denotes it to be worthless for metallurgic operations.

4. Native Silver in the Drift Stratum of Michigan.

This mineral has been found along the open shores of the lower peninsula called Sanilac and Tuscola, in the section east and south of *Point aux Barques*. That coast, extending to White Rock, has been noted for its heavy drift stratum of primary boulders; the discovery occurs in this stratum. It is in a mass of gneiss veined with steatite. Dissolved in nitro-sulphuric acid the precipitate yields, before the blow-pipe, the metal in increased splendor, ductility, and specific gravity.

Since the discovery of this metal in the copper-bearing veins of Lake Superior, additional interest is given to the hint furnished by this indication.

5. Petroleum on the Chickasaw Lands.

A spring of petroleum, or mineral oil, has been discovered in the Chickasaw country west. It occurs at the falls of a beautiful stream near Fort Washita. The petroleum exudes from the rock at a point where the latter overhangs the stream. It falls in drops which rapidly follow each other, producing an almost continuous small stream of the size of a thin reed. It is of a brown color. It possesses the taste, smell, and consistence of British oil, from which it, however, differs in its color and effects. Mingled with the water, it is drunk by persons affected with chronic rheumatism, and also applied by rubbing the parts affected externally. Surprising cures are stated to have been effected, in a short time, in pursuing this method. It has been found effective in cases of mercurial affections. Patients have been carried there doubled up with disease, or emaciated to mere skeletons, who have come away, in a few weeks, perfectly cured. But this is for medical men to judge of.

It may be remarked, in view of this discovery, that this substance, for which we are chiefly indebted, as an article of commerce, to the Asiatic continent, has been noticed in other parts of our territorial limits. The so called "oil spring" of one of the Seneca reservations, in Western New York, has long been known. Its consistence varies according to the action upon it of atmospheric air and solar heat.

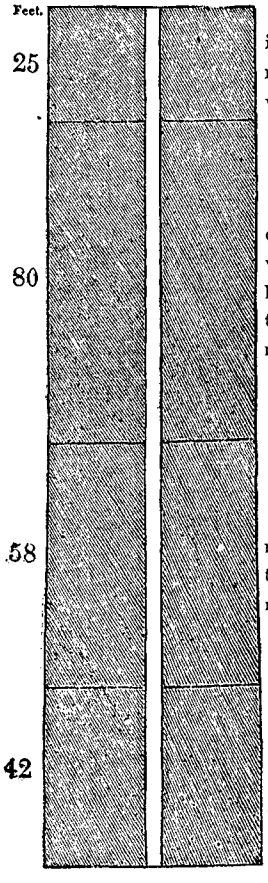
This discovery gives us reason to infer the existence of asphaltum, maltha, slaty coal, or some other form of bitumen, in the contiguous country, and may be considered as adding to the value of the newly-acquired domain of the expatriated Chickasaws.

6. Artesian Boring for Salt Water at Clyde, in Wayne County, New York.

These borings were commenced under an impression that the saliferous sand-stone, which appears to underlie the New York salines, would yield brine of a workable strength, at a given depth. They were carried 387 feet into the rock without producing the desired results. In this distance 61 specimens were taken, and very carefully enveloped in paper, boxed and transmitted by James R. Rees, Esq., of Clyde, to whom my acknowledgements are due. The following diagram and observations embrace the generalizations arising from this effort to penetrate the salt rock, and in this form they are contributed to the general stock of our information respecting salines.

It is still the belief of the best-informed persons, that our saline waters are produced from rock salt in the bowels of the earth, and that the waters thus impregnated flow in certain seams between the different strata, till they find some upward vent which forces them to their original height.

MEMORANDUM OF THE BORING FOR SALT WATER AT CLYDE, COMMENCED IN OCTOBER, 1832.


Feet.
25
80
58
42
Common earth, interposed with round stone, which was tubed.
Blue indurated clay, at times very hard, in layers from one to five feet, not necessary to tube.
Blue plaster rock, with crystalized veins running through it.
Red indurated clay—the pumping the color of blood.

No. 1 at 105 feet.	No. 22 at 279 feet.	No. 42 at 345 feet.
" 2 " 140 "	" 23 " 281 "	" 43 " 347 "
" 3 " 200 "	" 24 " 284 "	" 44 " 348 "
" 4 " 208 "	" 25 " 290 "	" 45 " 349 "
" 5 " 210 "	" 26 " 294 "	" 46 " 350 "
" 6 " 212 "	" 27 " 298 "	" 47 " 351 "
" 7 " 215 "	" 28 " 304 "	" 48 " 354 "
" 8 " 222 "	" 29 " 309 "	" 49 " 357 "
" 9 " 227 "	" 30 " 310 "	" 50 " 363 "
" 10 " 229 "	" 31 " 311 "	" 51 " 364 "
" 11 " 231 "	" 32 " 313 "	" 52 " 367 "
" 12 " 233 "	" 33 " 315 "	" 53 " 368 "
" 13 " 235 "		" 54 " 370 "
" 14 " 236 "	" 34 " 318 "	" 55 " 371 "
" 15 " 238 "	" 35 " 325 "	" 56 " 379 "
" 16 " 245 "	" 36 " 326 "	" 57 " 381 "
" 17 " 253 "	" 37 " 330 "	" 58 " 382 "
" 18 " 255 "	" 38 " 332 "	" 59 " 383 "
" 19 " 270 "	" 39 " 334 "	" 60 " 385 "
" 20 " 272 "	" 40 " 334 "	
" 21 " 277 "	" 41 " 335 "	" 61 " 387 "

Subsequently to these explorations, Mr. Rees writes, announcing the discovery of rock salt, by Mr. John Mead, Jun., at a definite depth. His boring was at a distance of five miles east of Clyde, on the line of the canal, at a place called Lockpit. He passed through a number of thin deposits of salt within the last thirty feet. Mr. Mead, whose subsequent experiments were interrupted, observed that twenty-two gallons of this saturated water which he obtained, would make a bushel of dry salt. It requires twenty-five gallons, generally.

7. Geography of the Genesee Country of Western New York. By Andrew M'Nab, Esq.

This district of country, both in its geographical features and geological character, presents three great *Steppes* or *Terraces*, commencing at, and extending longitudinally, parallel with the south shore of Lake Ontario, to Pennsylvania. (Lat. 42° N.) The *first* is about ten miles wide, north and south; the famous Ridge Road passing through the middle of it. The soil is strictly *alluvial;* being a mixture of sand, clay, and gravel, frequently covered with fine loam, and deep vegetable mould; timbered with beech, maple, basswood, and a large growth of hemlock (Canada pine). The *surface* between the Lake and the Ridge inclines gently to the N. N. E. From the Ridge Road south, to what is usually called the Mountain Ridge, a more rapid ascent and a greater undulation is observable. In this Terrace, the reddish freestone or sandstone is frequent, supporting the granular and fœtid limestone. Here also occur all the *salt springs* hitherto discovered; sometimes on the north, at other times on the south side of the Ridge Road. The iron ore is north of the Road.

The *second* Terrace commences at the Mountain Ridge, and stretches south about fifteen miles, to the foot of the limestone slope, so distinctly marked from Buffalo to Caledonia,—less visible across the Ontario, except, perhaps, at Farmington and Phelps,—but reappearing again very distinctly, in Cayuga and Onondaga, where the salt springs, plaster beds, and iron ores, are nearly united. The Tonnewanta Swamp occupies the highest part of this plain; it being seventy-five feet above the level of Lake Erie, and about three hundred and ten feet above Lake Ontario. The only streams of any note issuing from it, are Eighteen Mile, Johnson, Oak Orchard, and part of Sandy Creek. These have worn down the soil and attained so general an inclination of their channel, as to exhibit at this time no great perpendicular fall in their whole course. The evidences of recent submersion, the ragged and abraded appearance of the limestone, and the dry channels (indicative of a sudden recession and violent rush of water) from and around the north-east corner or shore of the Tonnewanta, strike the eye with surprise, and force upon the mind a belief that what is now a *swamp* was once a *lake.* Some of the *finny* tribes (probably *trout* of three

and four inches long) still inhabit the north-east corner of this great basin. Soil and timber, as in the former. Surface, rolling, and lying in parallel ridges.

The *third* and last Terrace extends from, and includes, the limestone slope, south, to Pennsylvania. The rocks are limestone, (probably the secondary and transition,) sandstone, (perhaps the grindstone or *grit*stone,) and claystone. Here the oldest rocks may at least be looked for; as we advance towards the Alleghanian spine, where the true primitive no doubt exists. In this Terrace, particularly towards the south side, the timber before mentioned prevails, with a considerable portion of pine, and some oak. The surface is still more uneven and abrupt; rising into hills of considerable elevation, and sinking into deep vales and gulfs. The waters of the St. Lawrence, Susquehannah, and Mississippi, divide in Steuben and Alleghany Counties, New York, and in Potter County, Pennsylvania; this being the pinnacle of the country. Most of the streams rising in, or crossing the Southern *Platform*, immediately on passing over the limestone slope, meet with obstructions from rising ground, and are diverted from a direct northerly, to a westerly or easterly course: witness, Tonnewanta, Black, Allen, Honeoye, Mud Creek, &c., to Mohawk River. The only exceptions worthy of notice, are Genesee and Oswego Rivers. The former rises between the source of Alleghany and Susquehannah Rivers, in Pennsylvania, and forces its way, through every barrier, to Lake Ontario. Its course at first is supposed to be rapid; forming perpendicular falls at various places; at McKay's Mill one or two great falls occur. Banks and bluffs gradually increasing in height; the current sometimes loitering through the meanders of fertile open flats; now advancing with a brisk current, over gravelly bottom, and then precipitating itself with noise and foam over ledges and perpendicular rocks; widening its channel as it descends, and wearing away the hardest stones by the incessant attrition of the *softest water;* thus furnishing a striking proof of the effects of *perseverance!* The high banks, compressed channel, and lively current, continue to Mount Morris and Squaky Hill; where a landscape of unrivalled luxuriance and beauty breaks full upon the delighted eye. The Valley of Canascraga opens to the right, winding round to the south-east towards Dansville; and to the left, the Genesee Valley extends north-east, towards Avon and Rochester; passing Geneseo on the right, and Moscow on the left. The deep trough worn down at Mount Morris and Squaky Hill, leaves little room to doubt that *here*, originally, was the fall which is now found five or six miles above, at Nunda; a retrogression similar to that of the Niagara Falls from Lewistown to Manchester. From Mount Morris and Williamsburg, the confluent waters of Genesee River and Canascraga Creek move *slowly* through one of the richest alluvial soils any where to be seen; the face of the country on each side gradually subsiding into moderate ridges, gentle slopes, undulating uplands, and extensive natural meadows. After receiving the waters of Canesus and Honeoye from the east, and those of Allen and Black Creek from the west, with other small tributaries, the majestic Genesee pursues the noiseless tenor of

its way to the rapids, about one mile above Rochester, full 10 to 15 feet, and then in the distance of two miles after, plunging over three falls, of 96, 10, and 74 feet, attains the level of Lake Ontario at Carthage; having worn for itself a channel through earth and rock, the banks of which are now about 200 feet perpendicular; the general surface of the country on each side still continuing of a regular slope to the lake. It is not a little remarkable, that at the rapids, above Rochester, the face of the country is such as admits of diverting the waters of Genesee River through the Canal, west, between sixty and seventy miles on a level; and east, on a level and inclined plane, to Seneca River.

The Oswego River drains all the country lying within a semicircle, whose centre is near Montezuma, and its radius sweeping from Rome in Oneida to Bloomfield in Ontario. After washing this extensive plain, and wandering through the Seneca Valley, it has forced a vent northwardly by the Three River Point—pitching over the falls, and murmuring on its course over a rocky bottom to the lake. Before the disruption of the country comprehending the Thousand Isles, it is probable that Lake Ontario covered the Seneca Valley, forming a deep bay up the Cayuga, &c., and having its outlet down the Mohawk and Hudson. This, however, is mere hypothesis. The Ridge Road commences at Lewiston, a step from the mountain, and diverges eastwardly—it is but slightly affected with a few streams, such as Eighteen-Mile, Johnson, Oak Orchard, Sandy Creek, &c. The Genesee River and Irondequat Bay discompose its uniformity; but immediately east of these, its regular form and direction are resumed and continued, until finally destroyed by Sodus Bay. Round the south and east side of the bay, some vestiges of the ridge are discernible in the direction of Oswego Falls, and probably might be found (passing by Black River high falls, in Turin, Lewis County) towards the elevated ground between the St. Lawrence and Mohawk Valleys. Neptune, it would seem, had a hand in forming this ridge; but here again his mode of operation is quite a mystery. It is composed of sand, gravel, and clay, with a light surface-mould. On moving the upper strata, a deep bed of clear bluish *lake gravel* and smooth *rounded pebbles and stones* appears. Its elevation above the adjoining plain and slope is quite moderate, and very uniform—varying from two to ten feet—width four to twelve rods—of a regular convex shape. While its singular formation furnishes a fruitful subject for geologists to ponder and speculate upon—the inhabitants derive incalculable advantages and conveniences from its wonderful adaptedness for travel, &c.—for without this *natural turnpike*, the adjoining country, although fertile and pleasant, would long remain without much travel or compact settlement. Now the country presents a gratifying view of social comfort and rural wealth on each side of this best of roads, lying midway between the Erie Canal and Lake Ontario. Of the western district it may justly be said, that it is the *Garden of New York.*

D. EXISTING GEOLOGICAL ACTION OF THE NORTH AMERICAN LAKES.

1. Fluviatile and drift-action.
2. Disintegration.
3. Apparent Tidal phenomena.
4. Perforated stones, from wave-action.
5. Temperature of the Lakes.
6. Crystallization in the North.
7. Continental abrasion.
8. Integrity of matter.
9. Lake refrachin.

THAT species of action which is supposed to have brought the surface of the earth into its habitable condition is comprised in the era of physical revolutions which are long past. By what causes, and according to what laws, these changes were produced, and their effects on the superposition and relation of strata, constitute no small part of the considerations of geology. Seas, rivers, mountains, and plains, are conjectured to have been left by those ancient revolutions, all of which preceded the historical epoch. It has been observed that the post-diluvial action of rivers flowing into the sea, and carrying down the usual accumulations of matter resulting from disintegration and gravitation, has added much to the area of their alluvions. Volcanic forces are continually exerting an action upon continents and islands; the beds of certain rivers are perceived to be elevated; large portions of the shores of the ocean curtailed of their limits; and, in this manner, the configuration of the earth is subject to large and appreciable alterations. All this is the result of a species of action which is very strikingly exemplified by the North American Lakes.

It is known that the quantity of water on the earth's surface is much greater in a new and forest region, where solar evaporation is hindered, than in old and long cultivated countries. No one will pretend that the quantity of water brought down by rivers is not diminished by these curtailments of the dominions of the forest. There was a time, within the habitable period, when the rivers of this continent ran higher than at present.

1. This existing action is of two kinds, both of which are remarkably exhibited in the area of the Lakes; namely, the action of general fluviatile drift or outflow, and the action of disintegration and atmospheric phenomena. The Mississippi possesses the drift power in a high degree. By its present overflowings it is destined to be always raising its bed and banks. It lays the Rocky and the Alleghany Mountains under

constant tribute for this purpose; and, if the present rate of deposition be maintained, the day is not far distant when the vast nascent deposits at its mouth, which are now covered with grass and water, will be known as some of the very best rice lands in America. Far less amount of labor in forming dykes and embankments than it has required to rescue Holland from the German Ocean, would now convert that tract of rich river-drift into a fertile and populous region.

2. Of the second species of action, that arising from disintegration and atmospheric phenomena, there is no instance on the same scale as is observed in the Great Lakes. I have selected the broad expanse of Lake Superior to exemplify this power. Hundreds of miles of uninterrupted wind and wave-power are here displayed. This sheet is one vast reservoir of elemental action: not only its large area and great computed depth have served, most fully, to develope this power, but this effect has been promoted by the very unequal degree of hardness of the rocky structure of its sides and bed; and it is within the scope of modern observation that, owing to this action, its boundaries have, under the actual fluctuations of its level, suffered great mutations. Being the only one of the series of lakes (with a partial exception in favor of Lake Huron) which has primitive borders and Alpine scenery, these effects are the more striking, and have imparted to portions of the coast a scenic grandeur, and boldness of outline, which are unparalleled.

This lake may be considered as occupying an interstice between the most northerly portions of the great diluvian and sedimentary formations of the Mississippi Valley, and the crystalline and vitreous rocks of British America. This ancient line of junction may be followed down its outlet, through the Straits of St. Mary's, into Lake Huron, and is continued along parts of its north and north-easterly shores north of the fossiliferous strata of the Manatouline chain. Lake Superior is, however, the most impressive field of remark, whether we refer to the ancient periods of its volcanic or oceanic energies, or the remarkable powers of elementary action still possessed by it.

The western and northern sections of this lake exhibit the strongest proofs of ancient action and upheaval. A colossal dyke of trap appears to have crossed the lake about two-thirds of its length from east to west. Admitting, (what appears to be very probable,) that the bed of the lake *west* of this dyke was originally produced by the sinking down of the strata, forming an anti-clinal axis, and the consequent elevation of its shores, we may attribute to the disturbing force of winds the central breach of this barrier, which has been subsequently widened by the ordinary force of the waters driven by the strong west and north-west winds, at a period when its water-line stood at one of its highest levels; so that, at this time, Isle Royal, Beaver Island, Ship Island, and the elevated precipitous range of Keweena Point, all of which consist of members of the trap rock, are the only existing monuments of this ancient dyke. The heavy beds of trap boulders east of this point, reaching in blocks of large magnitude to St. Mary's Falls, and the northern shores of

Lake Huron, strongly denote the probability of such action. Another proof of the extensive destruction of the central trap chain, is drawn from its mineralogy. This rock, (the trap,) as modern discovery denotes, is, everywhere, the true repository of the veins of copper ore, and of native copper, for which the shores of this lake have been so long noted. By their prostration, their mineral contents have been scattered far and wide, along with other debris, and hence masses of the metal, and its ores, are found along portions of the coast, where the strata not only give no indication of being metalliferous, but, geologically, forbid the expectation. Hence also the abundance, along parts of the Superior coasts, of fragments and abraded masses of agates, zeolites, amethysts, and other imbedded trap minerals, which were originally contained in the amygdoloid.

Action upon the harder rocks and their contents, is still very perceptible, particularly along the western face of the great point of Keweena, which is now known also to be one of the best repositories of native copper and copper ores.

At numerous points of this coast, the waves have acted on crevices or breaks in the stratification, until deep passages have been worn into the coast, and interior bays formed, into some of which, vessels of considerable burden can sail; and they form a very welcome shelter, in stormy weather, to the many row-boats, which visit these remote points in the prosecution of the fur, fishing, and copper trade.

But the most extensive scene of the existing energies of this lake, is witnessed upon its grauwackes and sandstones, which have been broken up, comminuted into fine sand, and piled up in elevated ridges, or spread out over wide plains along its southern margin. A coast of winding bays and headlands, which measures, by a reduced computation, four hundred and fifty miles, upon *this single section*, may be conjectured to have encountered heavy inroads from waves and currents forced across the lake by north winds, or acting diagonally from the north-east, or north-west. By far the most extensive field of this action occurs between the easterly termination of the crystalline series of rocks, at, and near Granite Point, and their reappearance in the elevated mountain ranges of *Gros Cape*, at the head of St. Mary's straits. The vast sand dunes, on this section, to which the French *couriers du bois* applied the name of *Les Grandes Sables*, constitute a most unique and picturesque object. Their perfect aridity, and great height above the lake, which has been computed at three hundred feet, and the general parallelism of the tops of the series of hills, strongly fix attention. These elevations are found, however, to rest on beds of clay, loam, and gravel, of a compact structure, and to be only buried beneath a coating or upper stratum, of loose yellow sand, which has been, manifestly, washed up by the waves, and driven land-ward by the winds. Tempests of sand are thus formed, which spread inland, bury or kill the tallest trees, and carry destruction and desolation in their track. Such is also the lake action of Huron and Michigan, the two next descending of the series of the lakes. Dunes are at first formed, which spread inland, carrying

sterility over many thousands of acres of land, formerly fertile, and well wooded; and the tendency of this peculiar atmospheric formation is constantly to extend its limits, and arrest the progress of vegetation.

Another effect of this sand-drift is, by obstructions of the water-courses, to form ponds and lagoons, at the temporary or fixed points of their termini, on the arable land, and thus to destroy, and render unfit for the use of man, other large belts of country; besides which, these arrested waters are the prolific sources of noxious vapors, generating extensive disease in the vicinity. Evidence of the comparatively recent era of this atmospheric formation is seen in the prostrated and buried trees, fresh-water shells, and other organic substances, in a perfectly unaltered state, which are, in some localities, noticed in digging at great depths, and sometimes exposed by recent eruptions of the waves. Such are the evidences on the east shores of Lake Michigan, between St. Joseph's and Grand Traverse Bay.

Another formation, due to lake action, and not to diluvial action, which cannot be mistaken, but of earlier age, is found in the large sandy plains along the lake shore, as between the Takwymenon, on Lake Superior, and Grand Sables. These plains bear a growth of pines, poplars, and birch, which but slightly conceal their comparatively recent origin. On examining and penetrating these tracts, ridges of sand occur, lying in win-rows, as if recently formed by the winds and waves. The depressions between these often embody water in the shape of small lakes, ponds, and marshes, which constitute the favorite retreat of the small fur-bearing animals.

The power of attrition possessed by Lake Superior and the other Great Lakes is so complete, upon the sandstone series, as to allow full scope to the principle of gravitation in the re-arrangement of the comminuted and upheaved materials. Large portions of the magnetic oxyde of iron exist in the northern sandstones. As these surcharged strata are ground down, in the great laboratory of the Lakes, this oxyde is liberated from its silicious connection, and reproduced upon the shore in separate and pure beds of iron-sand, which are, not unfrequently, a foot in thickness, and line the beach for miles. Such is the appearance of the coasts at Nezhöda and Mesácoda rivers.

A remarkable appearance has been produced at the Presque Isle river, which attests the power of attrition possessed by the waters of that stream. The river, within half a mile of its mouth, drops into a vast pot-hole of grauwacke rock, by a fall of about sixty or seventy feet. This cavity is eighty feet over, and in the summer season, when the water is low, produces an astounding spectacle of a striking cast. By going a little higher, the river is seen to have worn its bed for a depth of more than a hundred feet, perpendicularly, into the same rock.

The actual process, both of degradation and resistance, in the lighter colored and non-metallic sandstones, is nowhere better observed, perhaps, than along the walled and abraded coast locally known under the name of the Pictured Rocks. About

twelve miles of this mural coast is most completely fretted and riddled into curious architectural forms and caves, by the force of the equinoctial gales. Colossal caverns, into which large boats can enter, are formed under the impending rock, and it requires but little aid from the imagination, in passing along these shores, to behold, in their head-lands, and rounded columns, and toppling pinacles, the most imposing array of ancient ruins.

The annexed view (Plate 44) is taken, looking outwardly, from one of the principal caverns; it was sketched while seated in a twelve-oared barge, within the principal or labyrinthian cavern west of the point called *Doric Rock*.

It may be mentioned, before closing this paper, that there are several phenomena in the Lakes, in addition to those named, which deserve future philosophical notice.

3. Tidal Phenomena. — One of the most general of these is the appearance of a tidal current in the Straits of Michillimackinac, and the several points along the chain of lake waters, where bays intersect the main mass; as well as in the effect produced in the general levels of the surface. The cause of this has been but imperfectly investigated, but it appears to be due to the currents of wind as affected by general problems of temperature.

4. Perforated Stones. — The striking effect, resembling a reacting current, of the mass of Lakes Huron and Michigan, was early noticed. That this effect is not confined to the surface alone, but affects deeper masses of the water, appears to be proved by curious detached masses of limestone drawn up in the straits, by the fishermen's nets, from great depths.

These perforations of the boulders of limestone from the bottom of Lake Huron are very curious, and instructive of the mode of aqueous attrition. By examining them, it will be perceived that the most of the stone is completely perforated with cavities. Some of these extend through the mass; others part way; — a *few are* flattened or irregular. On a more minute inspection, it will be perceived *that* each orifice consists of annular rings; as if the impressions were left by a *boring* instrument, or, (what may furnish the true solution,) by some small inorganic substance, — as a minute pebble, which the water has kept in motion.

As these curious masses are drawn up from deep water, at 70 to 80 fathoms, in those jets of current which are formed by the influx and afflux of the waters of the straits, it seems clear that these singular perforations were formed by the oscillatory motion of very small pebbles.

The limestone itself is of the compact semi-crystalline character, which is common in Lake Huron, in inferior situations. Some of this compact limestone, examined in situ, is found to exhibit small open punctures, as if left by the point of a penknife. But these punctures may be supposed to be the impressions of pre-existing crystalline

Drawn by Capt. S. Eastman, U.S.A. from a sketch by H.R. Schoolcraft, Esq.

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CAVERN IN THE PICTURED ROCKS, (LAKE SUPERIOR.)

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matter, now decayed. They seem to owe their forms to minute crystals of the sulphate of strontian.

5. Temperature of the Lakes.—It is found, by experiment, that the rays of light passing through transparent bodies of lake-water, which is, of course, fresh water, do not in any degree heat them. Is not this phenomenon one cause of the coldness of the lake-waters? The infusion of muriate of soda in sea-water, by giving it the properties of absorbing heat, may tend to warm it; and hence, in the tropics, the sea is warmer.

6. Crystallization in the North.—Hitherto, the primitive rocks discovered near the shores of Lake Superior have yielded few imbedded minerals, or crystalline bodies. But there is reason to suppose that further researches and discoveries will disclose them. It is believed that the primitive or crystalline district contains granitic beds, highly crystalline in their structure. A mass of drift-granite at Green Bay contains a vein of highly crystalline matter, in which the plates of mica are large, shining, and distinct, and of a green color. It embraces very beautiful crystals of black tourmaline, common garnet, and a green massive mineral, which is apparently prase. A block of black mica, observed at Drummond Island, is manifestly brought from the primitive district, north or west of that point. It is crystallized in well-defined hexahedral prisms. A block of mica slate near Elm Creek, Lake Huron, yields staurotide. These, if we admit a current of water, or water bearing ice, as the disturbing force, may be supposed to have been transported from the region referred to; and indicate a range of crystalline strata in the north and west, quite varied and interesting.

7. Continental Abrasion.—If we are to regard the lakes as a grand geological triturating apparatus, converting its loose and shore-rocks into a pulverulent state, it may be anticipated that their action on the configuration of the shores will be very considerable, in the course of long periods. What is lost in this process in one place, from their rock area, is found to augment the quantity of alluvial soil in another; which, in time, renders the whole area suitable for agriculture. Thus the plough gradually, but surely, follows the tempest and the hurricane; while the absolute indestructibility of matter is man's guarantee under every change.

8. Integrity of Matter.—The absolute quantity and cubical area of material matter of these immense areas is still the same. The elements of which they are composed are seen to be indestructible. No change of combination or position is seen to take from, or add to, the material aggregate. If physical matter, under the force of tempests, could be destroyed, as well as change its forms, there would result an

annihilation of a part, or molecule, of the original accretion of elements. Wild as their rage sometimes is, casting vessels on high on these Lakes, the entire volume of them yet retains its integrity.

9. Lake Refraction.—The phenomenon of light, as seen on these Lakes, offers a still more familiar instance of changes in the position of matter, without adding to, or diminishing, its bulk. And in this, as in other departments of physical forms, while the instances vary, there are no evidences to show that in the resplendent refractions that visit these Lakes—in their curious mirages, and boreal displays, and brilliant sunset scenes, there ever was a combination which did not vindicate the wisdom, exactitude, and beauty of nature's laws.

E. ANTIQUE OSTEOLOGY OF THE MONSTER PERIOD.

SCARCELY a year passes that does not add to the number of localities, of the former existence of an animal era in America, attesting great changes. These discoveries are not alone confined to the Mississippi Valley, where they were first made. The borders of the sea-shore in South Carolina; the great marine deposits of Georgia and Alabama; and the clay and alluvial beds of the valleys of the Hudson River, have yielded some of the largest specimens of these antique bones; even the uplands of Vermont have recently given proofs of this kind. But it is to the valley of the Osage, in Missouri, that we are called, more particularly, to look. Speaking of this region, a correspondent remarks:

"The great West is affording to the learned and curious a vast and varied field for speculation in the various departments of science. It is filling the museums and cabinets of the world with rare mineralogical and geological specimens, while it is affording still more extraordinary and perplexing problems to the naturalist.

"The recent discovery of bones by Messrs. Case and Redman, of Warsaw, in the Osage Valley, transcends anything of the kind yet offered to the public, both in point of number and size. The bones represent a genus of animals long since out of existence. The age in which they lived is so remote, that even tradition does not reach back to it. They were probably contemporary with that race of man which inhabited the prairies and forests before the existing Indians; whose history is only told by the remains of their castles and fortifications, which were constructed upon scientific principles, of which no vestige is found among the aborigines.

"The place where these bones were found, is about two miles from town, and is familiarly known by the western people as a *lick*. There are many springs of a brackish sulphur water breaking through the ground, which have been resorted to by various animals, till there is an acre or more of it excavated to the depth of eight or ten feet. The bones were found two or three feet below this surface, imbedded on a black gravel. The probability is, that these animals resorted to this place for the salt held in solution by the water, and heedlessly plunging themselves into the mire, were frequently unable, notwithstanding their gigantic strength, to extricate themselves; and thus their remains accumulated to such an amount.

"The number of different heads found amounts to seventy or eighty; and the large amount of detached teeth shows that a greater number of these monsters have found a common grave in this basin. The bones which are found near the head of this basin, are in a much better state of preservation than those nearer the outlet. The skeletons of various species of animals are found deposited in this basin; as the

buffalo, elk, deer, &c. There are two species only found which are worthy of admiration; of the one there are but few specimens; only some teeth, and part of the maxillary bones in which they were set. These teeth are fissured on the sides, much like the elephant's molar teeth, and smooth on their masticating surface, which measures twelve by fourteen inches. The other species of bones, which are great in number and stupendous in size, have differently shaped teeth, and out of their superior maxillary grow tusks, some of which are twenty-five inches in circumference, and ten or twelve feet long. The tusks are not preserved entire. They appear to have been the finest quality of ivory. Many of the maxillary bones have the molars entire, and tightly retained in their sockets. These molar teeth are eight or nine inches by four or five, on their grinding surface, with deep fissures running across them, in which the eminences of the antagonising molar played. This formation of the molar of this animal is very different from that of the genus herbivorous, the grinders of which have smooth contiguous surfaces. The inferior maxillary is armed with a tusk fifteen or twenty inches in length. The femor is six or seven inches in its centre diameter, and presents an articulatory surface with the acetabulum of ten or eleven inches. The connection of the bone of the fore-leg with the shoulder-blade, presents a similarly large articulation. Few of the vertebræ have resisted the corrosion of time. They are entirely denuded of their processes, so that we can only observe on a few of them the canal for the spinal marrow, which must have been three or four inches in diameter.

"A striking peculiarity of these bones is, that they have no cavity for marrow, but are solid bone. They are not petrified, but are preserved as osseous matter, which is a conclusive argument that they have not been imbedded many centuries. We cannot fix the time when these extraordinary animals ceased to be inhabitants of the prairies, or what caused the destruction of the whole genus. How could they so violate the laws of nature as to forfeit the existence of their entire class? This secret will probably always be veiled in obscurity. The natural philosopher can find enough of curiosity and perplexity on this subject to engage his leisure hours, and the imaginative may entertain himself by clothing these mammoth bones with flesh, and studying what a figure the other animals of creation presented in the presence of this locomotive mountain."

The "study" here referred to requires great care, and a scrupulous reference to the conclusions of naturalists at home and abroad, to prevent that "perplexity" which the writer adverts to. Science is simple-minded, slow, and cautious in her steps. It is but a few years ago that the proprietor of a western museum visited this locality, and paraded one of these gigantic skeletons through the land, under the name of "Missourium."

The discoveries, which went to make up the sum of this huge frame of bones, were made on the *Pomme de Terre* branch of the Osage river, in latitude 40°.

The largest bones were found in a kind of quicksand about sixteen feet beneath the surface, at a spot where a copious spring of water existed. Over this was spread a stratum of brown soil with vegetable remains of various kinds, some of which were deemed to be tropical. Next on the series of strata, rising, was one of blue clay three feet thick, then about ten inches of pebbles, aggregated, then a light blue clay three feet thick, then another stratum of gravel, similar in thickness to the first mentioned. This was succeeded by three or four feet of yellowish clay; a third layer of gravel, and a brownish loamy earth or clay, mingled with pebbles, and bearing a growth of oak, maples, and elms. The whole formation appeared to be clearly diluvial.

I visited this skeleton after it had been set up at Egyptian Hall, in Piccadilly, London. It was thirty feet long, and fifteen feet high. There was something disproportionate and unnatural about it. By its great length of body, and enormous claws, it appeared, at first sight, to be a gigantic specimen of the megalonyx, with the head and tusks of a mastodon. There was also something that excited incredulity in the arrangement of the tusks. It was certainly a most gigantic specimen of the American faunæ, and excited great interest as such. But, aside from its great size, there was nothing new in the species. Mr. Owen, the British fossilist, decided it, from the teeth, to be a mastodon.

F. AN ABORIGINAL PALLADIUM, AS EXHIBITED IN THE ONEIDA STONE.

CHARACTERISTIC traits, in the history of races, often develop themselves in connection with the general or local features of a country, or even with some minor object in its natural history. There is a remarkable instance of this development of aboriginal mind in the history of the Oneidas.

This tribe derives its name from a celebrated stone, (a view of which is annexed, Plate 49,) which lies partly imbedded in the soil, on one of the highest eminences in the territory formerly occupied by that tribe, in Western New York. This ancient and long-remembered object in the surface geology of the country, belongs to the erratic-block group, and has never been touched by the hand of the sculptor or engraver. It is indissolubly associated with their early history and origin, and is spoken of, in their traditions, as if it were the Palladium of their liberties, and the symbolical record of their very nationality. Unlike the statue of Pallas, which fell from heaven, and upon which the preservation of Troy was believed to depend, the Oneida Stone was never supported by so imaginative a theory, but, like the Trojan statue, it was identified with their safety, their origin, and their name. It was the silent witness of their first association as a tribe. Around it their sachems sat in solemn council. Around it, their warriors marched in martial file, before setting out on the war-path, and it was here that they recited their warlike deeds, and uttered their shouts of defiance. From this eminence they watched, as an eagle from her eyrie, the first approaches of an enemy; and to this spot they rushed in alarm, and lit up their beacon-fires to arouse their warriors, whenever they received news of hostile footsteps in their land. They were called Oneidas, from *Oneöta*, the name of this stone, — the original word, as still preserved by the tribe, which signifies the People of the Stone, or, by a metaphor, the People who sprang from the Stone. A stone was the symbol of their collective nationality, although the tribe was composed, like the other Iroquois cantons, of individuals of the clans of the Turtle, the Bear, and the Wolf, and other totemic bearings. They were early renowned, among the tribes, for their wisdom in council, bravery in war, and skill in hunting; and it is yet remembered that, when the Adirondack and other enemies found their trail and foot-marks in the forest, they fled in fear, exclaiming, "It is the track of the Oneida!" To note this discovery, it was customary with the enemy to cut down a sapling to within two or three feet of the ground, and peel its bark cleanly off, so as to present a white surface to attract notice. They then laid a stone on the top. This was the well-known symbol of the Oneida, and was used as a warning to the absent members of the scouting party who might fall on the same trail.

Drawn by S. Eastman, U.S.A. from a sketch by H.R. Schoolcraft.

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ONEIDA OR ONEOTA STONE.

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The frequent allusion to the Oneida Stone in old writers upon the Indian customs, and its absolute Palladic value in their history, induced me to visit it, with Oneida guides, in the summer of 1845, and it is the fact of this visit that leads me to offer this brief notice of it.

I found the stone to be a boulder of syenite, imbedded firmly in the drift stratum, upon the apex of one of the most elevated *Yonondas* or hills in that part of the country. Its composition is feldspar, quartz, and hornblende, with some traces of an apparently epedotic mineral, in which respects it resembles (mineralogically) the very barren character of the northern syenites. Its shape is irregularly orbicular, and its surface bears evident marks of that species of abrasion common to primary boulders which are found at considerable distances from their parent beds. It is a peculiarity that its surface appears, minutely considered, to be *rougher* than is often found in remotely drifted blocks of this class of rocks, which may, perhaps, be the result of ancient fires kindled against its sides. That no such fires have, however, been kindled for a very long period, is certain from the traditions of the tribe, who have had the seat of their council-fire at Konaloa, or Oneida Castle, ever since the discovery of New York by Hudson; and how much earlier, we know not.[1] On closely inspecting this stone, minute species of mosses are found to occupy asperities in its surface.

The original selection of the Oneida Stone for the object to which it was consecrated by this tribe, was probably the result of accident. Or if we look to remote causes, it was the effect of that geological disturbance of the surface which left the drift stratum on the very apex of the hill. This hill is the highest prospect-point in the country. It was the natural spot for a beacon-fire. The view from it is magnificent. From its top the most distant objects can be seen, and a fire raised on this eminence, would act as a warning to their hunters and warriors over an immense area east and west, north and south. It is the highest hill of a remarkable system of hills, which may be called the Oneota Group, ranging through the counties of Oneida, Madison, and Sullivan, which throws its waters by the Oriskany, the Oneida, and various outlets into the Atlantic through the widely diverging valleys of the St. Lawrence, the Hudson, and the Susquehanna. It would be interesting to know its elevation above the ocean, in order to show its relation to the leading mountain groups of New York, and give accuracy to our interior topography;—an object, it may be said, which can never be attained without carrying a line of accurate heights and distances over the entire interior of the State.

It is one of the peculiar features of this hill of the Oneida or Oneota Stone, that its apex shelters from the north-east winds—the worst winds of our continent—a fertile

[1] By counting the cortical layers of a black walnut tree, growing in an ancient corn-field near the Stone, the place must have been abandoned about A. D. 1550—fifty-nine years before Hudson's discovery.—*Notes on the Iroquois, page* 52, *Legis. Doc., N. Y.*

transverse valley, which was originally covered with groves of butternut and other nut wood, having a spring of pure water, which gathers into a pool, and wends its way down the valley in a clear brook. In this warm valley, the Oneidas originally settled. Here they raised their corn from time immemorial—the woods abounded with the deer and bear, and smaller species of game. The surrounding brooks and lakes gave them fish, and they appear to have availed themselves of the first introduction of the apple into the continent, to carry its seed to these remote and elevated valleys, in which their orchards, on the settlement of the country, were found to cover miles of territory.

At the site of the spring in the valley, there was also found a remarkable stone—a block rather than a boulder, consisting of a compact greyish white carbonate of lime, which, from the little evidences of abrasion it bears, could not have been transported by geological causes, far from its parent bed.' This white stone at the spring has sometimes been called the Oneida Stone; but I was assured, in repeated instances, by Oneidas, and by residents conversant with the Oneida traditions, that the syenite boulder on the apex of the hill is the true stone, which the tribe regards as their ancient tribal monument.

I observed other boulders of various character on other parts of the hill, chiefly on its eastern declivities, all of which were of moderate size, and bore more or less evidence of the drift-abrasion. Nothing, indeed, in the natural history of the country, presents a more interesting subject of study than the Oneida drift stratum, which covers, as a part of its range, this elevated area of hills. We see here, along with the various forms of the sandstones, limestones, and grits, peculiar to the state, and the cornutiferous lime-rock and silicious slates of more distant parts, scattered along with pebbles of opaque and iron-colored quartz, granites, and porphyries. The origin and direction of this drift is a subject of considerable geological moment. Many of these boulders belong to the saline group of the sandstone system; a group of rocks which developes itself west of the sources of the River Mohawk and the Stanwix Summit; reaching, at some points, to the shores of Lake Ontario, and the inferior strata of the Genesee and Niagara Rivers. In searching for the direction of this drift, it may be well to look in the same general course, although we have not, I believe, any known beds of granites and syenites in place, in a north-easterly direction, till we reach the region of the ancient Cateracqua, the Kingston of modern days; and the Thousand Islands of the St. Lawrence River. Turning north-westwardly, we find no syenite in place till we reach the barren, desolate track which interposes between the north shores of Lake Huron and the south-eastern margin of Lake Superior. But the syenites of that region, as developed in the range between Gros Cape and Gargontwau, are more highly crystalline. The same superior degree of crystallization is observed in the remarkable knobs of syenite which rise, in place, through the prairie soil of the Upper Mississippi, at the Peace Rock, above St. Anthony's Falls;

a spot reached by the United States Interior Exploring Expedition of 1820, on the 28th of July.[1]

Among the boulders of the Oneida drift covering this eminence, I observed a small, column-shaped, black rock, standing in the soil, which had so completely the aspect of the black Egyptian marble from the Nile, that, for a moment, I fancied a trace of a similar silico-argillaceous stratum had been found in America. The illusion was sustained by a similar infusion of yellowish coloring matter. A fresh feature, however, instantly undeceived me, and disclosed a comparatively soft, argillaceous, sedimentary block, veined with a yellowish oxyde, which, lying at a comparatively high altitude, and exposed to fierce winds from the north-east, had assumed an exterior color and semi-polish quite remarkable.

But without attempting to trace these boulders to their primary sources in the geological system, there can be little question, from general observation, that the direction of the Oneida drift is towards the south-west. In this respect it differs but little from, if it does not quite correspond with, the general direction of the Massachusetts and New England drift, as observed by Dr. Hitchcock.[2] Such is the uniform course of the drift observed here, in positions where the force of the movement has not been disturbed by leading valleys crossing its course; such as are presented by the Mohawk below the Astorenga, or Little Falls, or by the Hudson Valley below the Highlands. In the former case, the heavy blocks of debris have been carried nearly due east; and in the latter, directly south.

These suggestions will denote the position of the Oneida Stone as a member of the erratic block group; but I do not desire to merge its historical and antiquarian interest in the consideration of its natural history. It is to the tribal origin, history, and character of the Oneidas themselves, that this monument is suited to bear its most important testimony. Ancient changes in the earth's surface have manifestly placed it here; but as a memento of such mutations, it is not more interesting than thousands and millions of tons of the primary and sedimentary drift which have been pressed onward and spread, broad-cast, by a mighty force, over this part of the State. But of all these thousands and millions of tons of drifted and scattered rock which mark the surface of the northern Atlantic States, — nay, of the whole continent, — this block alone, so far as we know, has been selected by one of the aboriginal tribes as the symbol of their compact. Piles of loose, small stones, such as that of Ochquaga, have been gathered in remembrance of a battle or an heroic act. Mounds of earth, whose origin and purport have been strangely mystified, have been piled up as objects to designate places of sepulture, of sacrifice, and of worship. Carved shells and wampum belts have been exchanged to perpetuate the sanctity of treaties and cove-

[1] Narrative Journal of an Expedition to the Sources of the Mississippi, 1820. Albany, 1821; 1 vol. 8vo.

[2] Vide his Geological Report.

nants among a people without letters. But this alone stands on this continent as the simple monument of a nation's origin, power, and name. This alone tells the story of a people's rise; and if we are careful of the fame of a brave and worthy people, who fought for us in our struggle for liberty, it will for ages carry their memory on to posterity.

No person can stand on this height, and survey the wide prospect of cultivation and the elements of high agricultural and moral civilization, which it now presents, without sensations of the most elevated and pleasurable kind. On every side there stretches out long vistas of farms, villages, and spires, the lively evidences of a high state of manufacturing and industrial affluence. The plough has carried its triumphs to the loftiest summit; and the very apex on which the locality of the monument, which is the subject of this paper, rests, was covered, at the time of my visit, with luxuriant fields of waving grain. Least of all, can the observer view this rich scene of industrial opulence, without calling to mind that once proud and indomitable race of hunters and warriors, whose name the country bears. That name has become, indeed, their best monument—quadruply borne, as it is, by a broad county—a spacious and beautiful lake—a rich stream and valley, and a thriving village which marks the site of the ancient castle. But all that marked the aboriginal state of the Oneida prosperity and power has passed away. Their independence, their pride, their warfare, the objects of their highest ambition and fondest hope, were mistaken, and were destined to fall before the footsteps of civilization. Even they themselves have submitted to the truths of a higher and better ambition. Many of their numbers have taken shelter in the distant valleys of Wisconsin. A portion of the tribe has joined the Iroquois settlements in Canada: in both which positions, however, they are no longer hunters and warriors, but farmers, mechanics, and Christians. The remnant who linger in their beloved valley, have almost entirely conformed to the high state of industry and morals around them. Their only ambition now is the school, the church, the farm, and the workshop. Not a single trace of paganism is left. Not a single member of their compact and industrial community is known, who is not a temperate man. Education and industry have performed their usual offices; and the State of New York, by a noble magnanimity, and welcome of race, worthy of her early and uniform history and character, has, it is believed, within late years extended over them the broad shield of her protective laws, her school system, and her peculiar and enlarged type of social liberality.

G. MINNESOTA.

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11. Stratum of the Beds of Lakes.
12. Character and Value of the Lakes.
13. Arid and Sphagneous Tract.
14. Fur Trade.
15. Native Quadrupeds.
16. Reindeer.
17. Hyena.
18. Wolf.

1. WHEN France ceded Louisiana to the United States, she committed the greatest geographical blunder in her history, excepting the cession of all New France by Louis XV., consequent on the fall of Quebec in 1759. These two events were essential to the United States eventually becoming a great and leading power; and their consummation was, as it is now seen, the very turning point of it. With a foreign and non-cognate race, as Frenchmen are, on our entire northern borders, from sea to sea, and the mouth of the Mississippi locked up, that great valley was as completely bound as Laöcoon in the folds of the serpent. Fortunately, the statesmen of that proud and luxurious court were not wise beyond their generation; and Bonaparte, when he completed the work by accepting three millions as an equivalent for Louisiana, thought a bird in the hand worth two in the bush. "*Bush*," indeed! which has already given origin to a cluster of States, and by the dispute with Texas, (a Spanish blunder, by the way,) has brought along, in its magnificent train, California and New Mexico. Already the Mississippi River, if we include its eldest daughter, the Ohio, has thirteen States upon its waters, not counting Territories; and it furnishes an outlet to the commerce of several more.

"Yet, though no rhyme thy banks to fame prolong,
Beyond the warrior's chaunt, the boatman's song,
More happy in thy fate than Ganges' tide,
No purblind millions kneel upon thy side.
Beyond the Nile, beyond the Niger blest,
No bleeding Parke, no dying Ledyard prest;
Or if one fate foredoomed the Gaul[1] to bleed,
Success o'erpaid and cancelled half the deed.
Not in hot sands, or savage deserts lost;
A healthful vigor blooms along thy coast,
And, ever blest above the orient train,
No crouching serf here clanks the feudal chain;
E'en the poor Indian, who, in nature's pride,
Serenely scans thy long descending tide,
Turns, in his thoughts, thy course 'twixt sea and sea,
And shouts to think that all his tribes are free."

Minnesota is the last legislative creation upon its waters, and bids fair, at no distant period, to make one of its noblest states. The area of territory comprised by it is computed by Mr. Darby at a fraction under 200,000 square miles; and it would be ample in area for the formation of three large states, facing respectively the Mississippi and Missouri Rivers, including the residuary portion of Wisconsin, of some 20,000 square miles, which, in consequence of the ordinance of 1787, can never be incorporated into a state by itself; and comprehending also the large area lying above the mouth of the De Corbeau River, which is, in a measure, sphagneous or arid. For this we may deduct, perhaps, 50,000 square miles. This would swell the arable area to the compass of three states of 60,000, or four states of 45,000 square miles each.

Taking the distance on the Mississippi, west, from the influx of the upper Iowa River to that of the Crow Wing, it cannot be less than 500 geographical miles. The quality of the soil between these points, reaching west indefinitely, which is at present Sioux and Chippewa territory, is of the richest kind of uplands and river-bottom, containing a mixture of woodland and prairie, and is well adapted to all the cereal grains. The zea maize is raised in great perfection in the valley of Red River, and of Great Lake Winnipec, which is north-west of the Mississippi. In the settlements of Lord Selkirk the grain crops are unfailing, and are only affected by floods or other casualties.

In speaking of the agricultural advantages of the territory, and of its soil and climate, allusion is chiefly had to the area south of Crow Wing River, and also to the region on the left bank of the river, between Sandy Lake or Comtaguma, Mille Lac, and the Rum and St. Croix Rivers. A territory, indeed, which gives origin to the Mississippi, and furnishes a thousand miles of her banks, on the right and left, can neither be small nor obscure. Such is Minnesota.

[1] La Salle.

2. The first subject that demands attention in the new territory, is the name. It has been frequently asked whether this soft and harmonious name be Indian; and if so, in what language or idiom? We have the authority of some practical inquirers in this matter, for saying that it is a compound Dacota or Sioux word, describing the peculiar clouded color of the water of the St. Peter's River. Whether this phenomenon be due to sedimentary blue clays brought down from its tributaries; to leaves settled in its bed; to thick masses of foliage overhanging its banks, under the influence of atmospheric refraction, or the influx of the Mississippi waters in its flood, is uncertain. But the Dacotas, who live on its banks, were early to notice it as a characteristic feature, and have embodied the description in the term *Minnesota; Minne* simply signifying, in the Sioux language, water. The term for river, *wah-ta-pah*, which the natives use as a noun-prefix, is properly dropped in adopting the word into the English language.

By the Chippewas, who live north and east of the Dacotas, this river is called *Oskibugi Seepi*, or the Young Leaf River, in allusion to the early foliage of its forests, or premature time of their putting out leaves; while the more boreal regions, occupied by them, are still standing in their wintry leaflessness.

3. Compared, indeed, to the shores of Lake Superior, the valley of the St. Peter's is an Italy, but, to the Saxon and Norman emigrant, who seek the country for its capacities of industrial employment, it has a higher value. The whole of southern and central Minnesota is eminently suited to the zea maize, and the entire family of the cereals. There is no part of the great West better adapted to wheat, corn, and the leading staples of Northern agriculture. The St. Peter's has long been noted, among travellers, for its precocious and blooming gardens; and the sylvan basin of Lake Pepin, and the valleys of the St. Croix, the Issati, or Rum river, with the St. Francis, Corneille, Osaukis, and higher tributaries, are found to be equally rich in their floral character and power of vegetation. Profitable agriculture is destined to extend, township by township, to the De Corbeau; and it must be borne in mind that Indian corn, which cannot be cultivated at *Sault Ste. Marie*, in latitude 46° 30′, is raised by the Indians annually, and ripens early in August, at the very sources of the Mississippi, and at Red Lake, north of them. The latter point is but a few seconds south of north latitude 49°.

Meteorological observations, made at Forts Snelling and Atkinson for many years, indicate a favorable climate at the latter post: the maximum heat, for the months of May, June, July, and August, 1848, was 82°, 88°, 84°, 81°, respectively; the mean temperature, during the same months, being, in their order, 63°, 65°, 71°, 62°, and the minimum 36°, 47°, 51°, 51°. Thunder showers are frequent in those latitudes, and even on the higher tributaries of the Mississippi. The amount of free electricity is thought to produce local currents which mitigate the sultriest days. Thirty-seven inches of rain fell at Fort Atkinson in 1848.

By observations made at Sandy Lake in July 1820, (vide Nar. Jour. Ex., p. 268,) the maximum heat at that lake is shown to be 90°, and the mean temperature between the 17th and 24th of the month, 73°, which is a little *higher* than the entire monthly average heat, in 1848, at Fort Atkinson, lying, atmospherically, south. Probably the entire month would sink the northern average a couple of degrees, showing a remarkable equability of summer temperature over a very wide range.

4. Volney appears to have been the first observer to notice the prevalence of a valley-current from the tropical latitudes up the Mississippi,—a remark in which he is sustained, at later dates, by Dr. Drake, of Cincinnati, and Dr. Hildreth, of Marietta. It is evident, from the scanty materials of observation we possess, that this gulf-current does not spend its force until it has well-nigh reached the southern terminus of the Itasca summit. It is certain that the extreme upper Mississippi escapes those icy winds from Hudson's and Baffin's Bays, which are often felt, during the spring months, in northern Michigan and northern Wisconsin. The same latitudes which cross the lake country give a milder climate in the valley of the upper Mississippi. One of the causes of this phenomenon has probably been noticed above. Others will doubtless be found by a scientific scrutiny of its meteorology. The observations being made by the government on this topic may be expected to enlighten us.

5. Longevity must characterize a country without fevers or congestions. Surgeons who have been stationed at the military posts of Minnesota and the upper Mississippi, give a favorable view of its diseases and their diagnoses, under the effects of the climate. Malignant fevers appear seldom or never to originate in longitudes north of about 44°. It is also known that the cholera, which in a single instance, in 1832, was carried by steamboat as high as 46°, at Michillimackinac, did not spread at that sanitary point, but was confined south of the general latitude of 44°. This point is, according to the late Doctor Forrey, very nearly the northern curve of the isothermal line. Both Green Bay on the east, and Prairie du Chien on the west, escaped its ravages. So far, however, as fevers and malignant diseases have been locally compared, there is a decided tendency in their development, to pass north of the lake latitudes, in the Mississippi Valley.

6. Both banks of the Mississippi, within the boundaries of Minnesota, are quite elevated. This elevation is rocky and often precipitous, at the river's brink, as high as St. Anthony's Falls. Above that point, which is, according to Nicolet, in latitude 44° 58′ 40″, a succession of elevated plains, with forests of the drift stratum, come in, and characterize both banks, as far up as Sandy Lake, and, with intermissions, quite to the falls of Puckäguma. The consequence of this elevation is, that its waters, which reveal themselves abundantly in pure springs, lakes, and streams, flow into the Mississippi with rapid currents and cascades, presenting numerous seats for hydraulic works. The pine forests of Minnesota may be readily converted into lumber to supply the central and lower portions of the Mississippi. The falls of the St.

Croix, of the Chippewa, and other tributary streams, have already been occupied, in part, with saw-mills. At the Falls of St. Anthony, where the Mississippi, agreeably to the measurement of Captain S. Eastman, U. S. A., drops twenty feet perpendicularly, with strong rapids above and below, its power may be thrown, by a series of mill-canals, upon almost any amount of machinery. This point, which is distant nine hundred miles above St. Louis, and about 2200 miles from the Gulf, is the true head of steamboat navigation of heavy tonnage, and must become an important manufacturing city and point of transhipment. In a future state of the country, steamboats of moderate tonnage may be built above the falls, to run during the freshets, as high as Comtaguma, or Sandy Lake, and Puckäguma. They may also ascend the De Corbeau to the mouth of Leaf River.

7. The topography and general geography of Minnesota cannot be well understood without giving full prominence to the character, course, and origin of the Mississippi. Geologically considered, the Mississippi River originates in the erratic block-group or drift stratum of the north, in longitude 18° west of Washington, and north latitude 47° 13′ 35″, agreeably to Mr. Nicolet. This stratum develops itself in a prominent range of sand-hills, once probably naked ocean dunes, which throw out copious springs of the purest water on all sides. These infant sources of the "father of rivers" first gather themselves together in a handsome lake, called Itasca, of some five to seven miles in length, whose shores are surrounded with deciduous trees. The scene is one of picturesque beauty. From this lake, the Mississippi sets out on its wonderful course of more than 3000 miles to the Gulf, by an outlet sixteen feet wide, with a depth of fourteen inches—making a body of pure crystal water, gliding rapidly over a sandy and pebbly bed, in which the traveller, as he shoots along in his canoe, can see the broken white and pearly valves of the unio and other fresh-water shells of the lake scattered in its bed.

8. Thus much topographically. This great northern drift stratum, which constitutes the height of land, rests on a broad range of the crystalline or primary rocks which cross the continent between latitudes about 44° to 50°, linking together the mountain groups of the Labrador and Hudson's Bay coasts with the Rocky Mountains. To these broad ranges and mountain-outbreaks, as they are developed west of James' Bay and north of Lake Superior, Bouchette, the geographer of Canada, has applied the name of *Cabotian Mountains*, in allusion to the true discoverer of North America.

9. Agreeably to this theory, the St. Louis river, which falls into the head of Lake Superior, presenting a series of magnificent views and cataracts, passes transversely through the Cabotian chain; while the Rainy Lakes and the Lake of the Woods lie north of it. This range of transverse rocks, which, with all its diluvial and drift covering, does not rise over 1600 feet above the ocean, may be said by its "rocky roots" to continue west from the Itasca highlands, and to divide the waters of the Upper Missouri from those of the Saskatchiwine, and Assinaboin Valleys of Red River

and Lake Winnipec. The natural line of elevations denotes this. It is, in fine, the transverse *Wasserschied*, between the Hudson's Bay and the St. Lawrence waters and those of the Gulf of Mexico.

10. It is impossible to visit this remote summit, to which the French apply the term *Hauteur des Terres*, and examine its oceanic dunes, gravel-beds, and sand-plains, without supposing the present condition of its surface to be the result of oceanic currents, however produced, which, at a very ancient period of the globe's history, poured their waters over these heights, surcharged with the ruins of broken strata and disrupted formations which once spread over the area north of them.[1] We observe, amidst the heavy beds of comminuted sandstones and slates, and of primary rocks from remoter positions, wide-spread evidences of trap and greenstones, grauwackes and amygdoloids, which tell of the prostration of volcanic formations, with all their peculiar imbedded minerals and vein-stones. Of these latter, the harder varieties of the quartz family, with zoned agates, and, less abundantly, chalcedonies and carnelians, are found both in the dry drift at the highest elevations, and about the shores of lakes and streams. These masses have been carried, by fluviatile action, down the Mississippi Valley to great distances, suffering more and more from the force of attrition. They are often picked up, very well characterized, on the shores of Lake Pepin. I have traced them as low as St. Louis and Herculaneum.[2]

11. It is a peculiar feature of the Itasca summit, and its various steppes, that it has a sub-soil, or deposit of an aluminous or impervious character, resting below the various sand-plains, loams, and loose carbonaceous and lacustrine beds. This appears to be the true cause of the retention, at those heights, of a vast body of water, in the shape of lakes, which are of every imaginable size, from half a mile to thirty miles in length. It will not be too much, perhaps, to say that ten thousand of these lakes exist within our borders, north of latitude 44°. These lakes in the drift stratum, so remarkable for their number, consist of transparent and, very often, very pure water; the temperature of which is generally 8° to 10° below that of the atmosphere. (*Vide* Nar. Jour. Ex. of 1820, p. 168.) They are supposed, in several districts, to have a subterraneous communication with each other, whereby their purity and liveliness is preserved without visible outlets. The water that sustains such a system of lakes and rivers is, manifestly, the result of the condensed vapors of the ocean, wafted from warmer latitudes to these broad eminences.

12. The lakes of the sub-mountain region of Minnesota may all be considered as falling under two classes, those with clean sandy shores, and a considerable depth, and those whose margins consist of a sphagneous character, and abound in the *zizania palustris*, or wild rice, and are comparatively shallow. The former yield various

[1] Geological Report of the Expedition of 1820, War Office, Washington.

[2] View of the Lead Mines of Missouri, 1819.

species of fish; the latter serve not only as a store-house of grain for the natives, who gather it in August and September, but they invite myriads of water-fowl into the region, and thus prove a double resource to the natives. It is constantly affirmed that fish are taken in lakes which have no visible outlet. Some of the larger open lakes connected with the Mississippi yield the white fish, which is so celebrated in the *upper lakes*, while in no case has fish of this species ever been found in the Mississippi itself.

13. The country around the sources of the Mississippi, extending to the Lake of the Woods, and the old Grand Portage of Lake Superior, is not adapted to profitable agriculture. Some portions of it, in the angle west of Lake Superior, extending to the Lake of the Woods, and the source of the St. Louis River, are naked rocks, of the crystalline and volcanic kinds, and are entirely valueless for the purposes of agriculture. Other portions of it, reaching across the actual head-waters of the Mississippi, to the high ground of the Otter-tail Lake, and Itasca summit, have a large proportion of arid sand-hills and plains, and an almost illimitable number of lakes and *Muskeegs*.[1] The proportion of fertile land in this area is rendered less valuable than it otherwise would be, from its isolation by waste waters and barrens, and the impracticability of connecting the good tracts by roads. West of the *Hauteur des Terres* the lands are fertile, consisting of woods and prairies which are easily traversed.

14. This region has been considered as a central point for the Fur Trade. It has been noted, from the first settlement of Canada, as abounding in the small furred animals, whose skins are valuable in commerce. Its sources of supply to the native tribes have been important. It has, at the same time, had another singular advantage to them from the abundance of the grain called *monomin*, or rice, by the Chippewa Indians, and *Psin* by the Sioux. Its lakes abound with water-fowl and fish. Its forests and valleys yield a sufficiency of the *acer saccherinum* to enable the natives to make maple sugar: and, if the territory of Hudson's Bay were ceded to the United States, it would form a suitable area for an Indian colony.

15. Besides the beaver, otter, mink, muskrat, fisher and martin, whose furs are valuable, it yields many of the larger quadrupeds. There are some portions of it where that remarkable animal still exists, which the Indians call *möz*, and the Americans *moose*, the largest of the deer species. This animal, which has nearly the strength of the horse, and resembles it in height, is very wary, and quick of hearing. The least noise disturbs it, and the Indians hunt it with great care. Its flesh is much esteemed by them. The elk, red deer, and common black bear, are common. Its western skirts, on the Red river plains, yield the grizzly bear—the *lion of the region*, if strength be the point at issue. To kill this animal is an object of prime boasting with the natives and hunters.

[1] Geological Report, 1820.

16. Reindeer. — Portions of the country yield the carriboo, which is an American species of the reindeer — the *Cervus Americanus*. This beautiful and fleet animal, which has a split hoof, is provided with a foot that enables it to spread it over a considerable surface at every step, so as to walk on the surface of the deepest snows. It subsists during the winter season on mosses. Its flesh is a most delicious and delicate venison, and its skin is dressed by the Indian females for their finest garments.

17. Hyena. — It is not true, as has been supposed, that the glutton or hyena of Europe exists on the sources of the Mississippi. The only species of this family found by the hunters, is the wolverine; a vicious animal, which will dig up *caches* of provisions, and commit various depredations.

18. The Wolf of this region is the *canis lupus;* well haired, and of good size. To the naturalist the region is deeply interesting; but an enumeration of its various productions would require more time and space than are at our command.

V. TRIBAL ORGANIZATION, HISTORY, AND GOVERNMENT. A.

V. TRIBAL ORGANIZATION, HISTORY, AND GOVERNMENT.

GENERAL SYNOPSIS.

1. Preliminary Remarks.
2. Shoshonee or Snake Nation.
3. Indians of Oregon, the Rocky Mountains, and the Pacific Coasts; by N. J. Wyeth, Esq.
4. Comanches and other Indian Tribes of Texas, and the Policy to be pursued respecting them; by D. G. Burnet, Esq.
5. Indian Tribes of New Mexico; by Gov. Charles Bent.
6. Dacotas of the Mississippi; by Thomas S. Williamson, M. D.
7. Small-Pox a Scourge to the Indian Race.
8. Tribes on the Santa Fé Trail, and at the foot of the Rocky Mountains.
9. History of the Creeks or Muskogees.
10. Massachusetts Indians.
11. Former Indian Population of Kentucky.
12. History of the Menomonies and Chippewas.
13. Miscotins and Assigunaigs.
14. Origin and History of the Chickasaws.

THERE are about seventy tribes, nearly all of whom are susceptible of being generalized into five ethnological groups, who have constituted the object of our policy and laws, during the three-fourths of a century that the Republic has exercised sovereignty over them. No tribe which was in existence in 1776 has become extinct. The wars that have been maintained on the frontiers have been purely wars of defence. They have never been wars of aggression, the object of which has been, in any sense, the acquisition of territory. Nor have the tribes in these contests suffered depopulation.

The loss of numbers in battle has been light, compared with the slow, heavy, onward march of fixed and permanent causes, contravening the maxims of industry and population which have marked their long intervals of peace.

National vanity; the pursuit of the false and exhausting objects of the chase; the neglect of agriculture; the pride that has kept young men from learning trades, while mechanics were employed to teach them; and the general use of distilled drinks, have at all times had a most inauspicious bearing. But, over and above all, the prolongation of the period of the maxims and customs of Indian society, as they are evinced in the disregard of thriftful housewifery by the Indian females; and the fiscal means which the tribes have so profusely revelled in, by the annual waste of their cash annuities. These have been the great means of their depression and declension in every period of our brief history.

The Indian communities on our borders have not labored for to-morrow. They have languished and declined most, not during seasons of war, when civilized nations sink in numbers, but during long periods of peace. It is, in truth, the peace-periods of the Indian tribes, when their non-industrial and idle character, and their proneness to vices which are the bane of every society have had uninterrupted scope, that the political economist must mark as peculiarly the depressing eras of their history.

The final adjustment of the Oregon question added to our public care about sixty small tribes, sub-tribes, and clans; of whom we are still imperfectly informed, statistically and ethnologically, but whose aggregate population at present is, from the latest accounts, less than 25,000. The acquisition of Texas, of New Mexico, and of California, have greatly enlarged the number of tribes within our limits, and the duties imposed by the Indian intercourse laws.

In extending these inquiries to the whole number of tribes within the limits of the Union, under these territorial accessions, Congress has greatly enlarged the sphere of investigation. The information now submitted on the organization of the tribes, comprises a selection of the materials received from each of the leading groups scattered over the Union. It will be followed by other matter, on the several heads, as soon as it can be digested and prepared for publication.

1. PRELIMINARY REMARKS.

A. Totemic Organization of the Clans and Tribes.
B. Patriarchal Family Circles.
C. Councils.
D. Tenure of the Chief's Office.
E. Popular Element.
F. Sovereignty of Councils.
G. Opinion Gathered without a Vote.
H. Generic Groups of Tribes.
I. Popular and imposed Names generally Misnomers.
J. Tribes who have constituted the Subjects of our Policy for Years.
K. Advantages of Viewing them in Groups which constitute a Unity.
L. Necessity of authentic Facts to deal with.
M. Danger of adopting an Artistic Theory of Indian Character.
N. Proposed to concentrate the View of his History and Condition in Tableaux.
O. Tribal History and Divisions of the Atlantic Tribes.
P. Theatre of French Discovery, still Algonquin.
Q. Iroquois, intrusive into the Algonquin Circle.
R. Dacota Group.
S. Muscogees and general Appalachians.
T. Shoshonees or Fifth Group.
U. Ungrouped Tribes.

A. THAT feature of the organization of tribes which consists of their being associated in clans, or what has been more appropriately denominated the *totemic tie*, may be deferred to the full consideration of their manners and customs. This feature is designed rather to produce fraternity and the means of at once recognising it, than for any practical operation upon their simple theory of government.

B. The type of their government is clearly patriarchal. Nothing can be simpler or contain less of those principles which writers regard as a compact or agreement, implied or otherwise. Respect for age constitutes its germ. The head of the lodge rules by this power, and the effect is precisely commensurate with the fulness and perfection of the cause. Opinion gives it all its force, and opinion breaks its power as often as it is justly called in question.

C. Councils are called whenever the matter in hand is more weighty than pertains to the affairs of a single lodge or household fraternity. These bodies are made up of the old men. The members are called *O-gi-mas*, by the Algonquins, and by a word of similar meaning among all the tribes. Persons who are so associated are no

longer styled *nösas*, or fathers, which is the term for the head of the lodge circle. The new term of Ogima is therefore a civil cognomen; it is the equivalent term for magistrate.

D. Ogimas who have distinguished themselves for wisdom, good counsel, or eloquence, lay the foundation for expecting that office to be continued in their families; and where the expectation is not particularly disappointed, or where it is completely fulfilled, the office is deemed hereditary. But the office, at every mutation by death, receives a new vitality from opinion. If no capacity for good counsel is manifested; or if there be no examples of bravery, endurance, or energy of character, in forest scenes, the office of a chief becomes merely nominal, and the influence exercised is little or nothing. If, on the contrary, there arise among the class of warriors and young men daring and resolute men, whether gifted with speaking powers or not, opinion at once pushes them on to the chieftains' seats, and they are, in effect, installed and recognised as chiefs.

E. In the Algonquin tribes the chiefs are the mere exponents of public opinion. They are prompted by it on all questions requiring the exercise of any *responsibility*, or which, without much responsibility, are merely *new*. When so prompted, they feel strong. They express themselves with boldness, and frequently go in advance of, or concentrate the public voice, in a manner to elicit approbation. They are set forward by the warriors and young men as the mouth-piece of their tribes, to utter views which depict the Indian as a man whose rights are constantly trenched on by the whites; who has suffered many things from the beginning, who endures continued trespasses on his lands, and who is the proud defender of the domain of the forest, as the resting-place of the bones of his fathers. In all such topics the chief has a free range, and will be sure to carry his listeners along with him.

But let the topic be an internal question — a fiscal, or land question — a question of division of any sort, and his power is at an end. He immediately disclaims the idea of settling it, without private councils with the warriors and mass of the nation, and it is only when he has thus been instructed, that he returns to the council, to uphold or defend questions.

F. In such a government of chiefs and counsels, resides the sovereignty. They make peace and war; they conclude treaties and agreements. We treat with them, at these open councils, as fully competent to exercise the powers assumed. And we uphold the chiefs and councils, as the rightful constituted authority. So far as popular opinion, among the tribes, will bear it, the power and authority of the chiefs should receive the marked countenance of the government.

G. Such is the civil organization of the hunter tribes. There is no formal mode of expressing opinion, as by a vote, unless it may be termed *acclamation*. Elections by ballot, *viva voce*, or taking private suffrages in any form, is a characteristic of high civilization. The natives never practised it. For such of the semi-civilized tribes as

have at the present day adopted written constitutions, and a system of elections, these constitutions are referred to.

H. The North American Indians exist in extensive leading groups, having affinities of language and blood. Though there be scarcely one of the tribes of any note, which does not possess some peculiarity by which it is readily recognised, among themselves, and persons intimate with their customs; yet, when they are attentively considered, the generic points of agreement, physical and mental, are such as to create little difficulty in their classification.

I. The tribes within the present area of the United States, and whose ancestors were chiefly within the British colonies, have become familiar by their popular names of Mohawk, Delaware, Cherokee, and other terms, (generally very different from those by which they call themselves,) which bring up associations connected with masses of hunter-men, of fixed peculiarities and traits, and living in particular geographical districts.

J. The seventy separate tribes which have rendered themselves familiar to us, in the area east of the Rocky Mountains, by their acts since we have known them, embrace some of the most intense elements of popular history. Negotiations, ruptures, battles and ambuscades—massacres and murders, tend to impart a thrilling excitement to the narrative of events; though, as a whole, there is not enough of sustained interest, perhaps, the Iroquois excepted, in any single tribe, to render the theme of much value, beyond the recital of an historical sketch.

K. It is by regarding these fragmentary tribes as a race of men who have contended for certain objects, and manifested fixed peculiarities of character, and form a unity, that the pen of history is hereafter destined to find a fitting theme for one of its highest and noblest exercises. There is no want of sympathetic interest in the theme itself, since it is perpetually connected with the transactions of the diverse races of Europe who have colonized the continent; nor is this interest at all diminished when we reflect that the objects of it are likely, in many instances, to disregard the voice of philanthropy, letters, and Christianity, or that many of the tribes have already perished, while others appear destined to follow their track. No species of humanity, or of pious zeal, basing itself on the moral experience of the world, has been able to arrest the blind thirst of war; the paralyzing flow of intemperance; or the fatal apathy of character, by which so many have met their fate: but, while this is seen and acknowledged, there is nothing, in an exalted view of moral effort, to lead noble minds to slacken their efforts while there is left a Red man on the continent, whose destiny may be exalted. *That* legislation performs but half its office which is not governed by the maxim, that it holds a complete remedy in its hands for every legal want or civil and social disorder; and what else is destroying the Indian?

L. To render the condition in which the tribes exist apparent, at the present time, while the whole area of their former dominion is being cut up and organized into

communities, it is essential that we should make our appeal to a body of facts entirely authentic in its character. It is with this view that the Census and Statistics are commenced, of which the first part is herewith published, and it is with the same view that these historical illustrations are given. If the man is to be judged, like all other races of men, by his capacities for usefulness and improvement, compared with his means of industrial and moral action, and the facilities, or hindrances, that attend their use, then it is of the highest importance that we should accumulate facts.

M. That artistic conception of the Indian character, in which the world has so long indulged, is calculated to lead the mind away from the weightier moral problem before us. Can he be recovered from his state of barbaric pride and indolence? Can his hatred of labor be surmounted by a pleasing vista of new hopes and excitements? Is there any thing to gratify his ambition, but that which gratified his forefathers' ambition, wars, and deeds of hunting? Can his sublimated and unbounded notions of a Deity be concentrated and humanized?

N. It is proposed, in these papers, to furnish tableaux, or historic materials of the man, for future use. They have been gleaned from the recesses of the wilderness; they are chiefly contributed by persons who have passed through the severe ordeal of frontier life—men who have looked death in the face in various forms. That materials thus obtained may lead to the formation of definite and truthful conclusions, the tribes, whose customs or peculiar traits are brought into view, are arranged in ethnological groups. It has been premised that the Indians exist in such groups.

O. The first vessels which Sir Walter Raleigh sent out, in 1585, landed among a generic stock of people, who are, by writers, denominated Algonquins. It was near the southern terminus of their ancient point of territorial dispersion. They were divided into numerous tribes, all bearing different names. The diversity of races, so utterly opposed to every thing in civil life, led to the extirpation of these first adventurous colonists. The actual founders of Virginia afterwards landed among the same people. Lord Baltimore's colony of Maryland landed among kindred *tribes*, but bearing different names. William Penn located his patent in the *midst* of an ancient and once powerful people, dialects of whose language appeared to have been scattered along the entire Atlantic coast at an early day, but which all the tribes still sufficiently recognised by their vocabularies as a radical language. Hudson, in 1609, found branches of the Algonquins, if not of the Delaware type of it, at Manhattan; and the English emigrants, in 1620, found a people of kindred language spreading throughout New England, and reaching, with changes, such as that of the Souriquois, to the Gulf of St. Lawrence.

P. The French, in 1608, found a people speaking the same generic language, on the north banks of the St. Lawrence, between Three Rivers and the site of Quebec. They found the same race, at quickly successive periods, at Lake Nepissing, on the head of the Ottawa River, and dwelling around the Basins of Lakes Superior, Huron,

Michigan, and a part of Erie. They traced them down the Illinois and the Wabash, and by the ancient sites of Vincennes and Cahokia, quite to the mouth of the Ohio. Half the area of the present Union was thus covered by one group. The French missionary writers called it Algonquin,[1] and the term came into early, popular use, without designing any injustice to the Lenapees, or Delawares, who appear to have claims to great antiquity in this wide-spread family. By the compound term "Algonkin-Lenapee," introduced recently by the late Albert Gallatin, we advance nothing in their history; it is still precisely the same people, in every respect whatever; and the phrase is farther subject to objection as embracing a controverted theory. A Virginian might, with the same propriety, introduce the term *Algonkin-Powhatanic.* We should still gain nothing but words.

Q. Into this great circle of the Algonquins, a group of tribes speaking a diverse language, called the *Five Nations*, and then the *Six Nations*, and by the French the *Iroquois*, had intruded themselves before the landing of the Dutch under Hudson, or the English at Plymouth. They appear, from Colden, to have been originally inferior to the Algonquins in forest arts, and wars; but, possessing the fertile area of Western New York, and being, to a large extent, cultivators of the zea maize, they appear, at the date of the colonies, to have been in the course of increase. This was greatly facilitated and determined by dropping their internal feuds, and forming a general confederacy. Being supplied with fire-arms by the Dutch, they first prevailed against the Eries, and afterwards carried their conquests to Sandusky and the Miami of the Lakes, to the Illinois, to Michillimackinac, and to Point Iroquois, at the foot of Lake Superior, and finally to Montreal itself. This celebrated group has close affinities with the Wyandots of the West; with the Tuscaroras, and, apparently, some other tribes who formerly inhabited North Carolina; and they will probably be found to have affinities in New Mexico and Utah.

R. West of the Mississippi, the Sioux, or Dacota tribes, furnish the type of language for another group of tribes; which embraces the Iowas, the Omahas, Otoes, Missouries, Osages, Kansas, Quappas, and a great circle of prairie tribes.

S. A fourth group is furnished by the Muskogees, or Creeks, Choctaws, Chickasaws, and many minor tribes, of modern or semi-ancient date, who formerly dwelt in the Carolinas, Georgia, Alabama, Mississippi and Louisiana. This group, as it is made up of tribes sub-tending the Appalachian chain, may bear that appellation. These four groups cover agricultural America.

4. The progress of discovery, which is now being prosecuted, has disclosed a fifth group in the Comanches, Shoshones, Snakes, Bonacks, and other tribes of the Rocky Mountains, the higher Red River, and the Hill country of Texas. To this the term of Shoshonee may be applied.

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[1] Recent researches show the Blackfeet to belong to this group.

U. Discoveries in Oregon, and in California, Utah, and New Mexico, are in too incipient a state to warrant any grouping of the tribes founded on the type of language. The same may be said, to some extent, of the contemplated territory of Nebraska, and as to portions of Texas; where inquiries are now being pushed, through the medium of language.

There is an apparent element of a new, and *sixth* group east of the Rocky Mountains in the *Chawa*, or *Cheyenne Indians*, agreeably to specimens of language and numerals furnished by Lieutenant Abert, U. S. A.

2. Shoshonee, or Snake Nation.

The various tribes and bands of Indians of the Rocky Mountains, south of latitude 43°, who are known under this general name, occupy the elevated area of the Utah basin. They embrace all the territory of the Great South Pass between the Mississippi Valley and the waters of the Columbia, by which the land or caravan communication with Oregon and California is now, and is destined hereafter to be, maintained. Traces of them, in this latitude, are first found in ascending the Sweetwater river of the north fork of the Platte, or Nebraska. They spread over the sources of the Green River, one of the highest northern branches of the Colorado of California, on the summit south of the great Wind river chain of mountains, and thence westward, by the Bear river valley, to and down the Snake river, or Lewis fork of the Columbia. Under the name of Yampatick-ara, or Root-Eaters, and Bonacks, they occupy, with the Utahs, the vast elevated basin of the Great Salt Lake, extending south and west to the borders of New Mexico and California. Information recently received denotes that the language is spoken by bands in the gold-mine region of the Sacramento. They extend down the Sä-ap-tin or Snake river valley, to and north of latitude 44°, but this is not the limit to which the nations speaking the Shoshonee language, in its several dialects, have spread. Ethnologically, the people speaking it are one of the primary stocks of the Rocky Mountain Chain. They are located immediately west of the wide-spreading tribes who speak the Dacota language, and south of the sanguinary Atsinä-Algo, or Blood and Blackfeet race. The Yampatick-ara are represented as timid, degraded, and wretched, without arts, picking a miserable subsistence from roots, and other spontaneous means of subsistence, in a barren region, often eating larvæ, not planting a seed, and wandering for food and shelter amid scenes often as rugged as the Alps, or the steeps of the Uralian Chain; yet a closer examination denotes that their timidity, degradation, and wretchedness are, measurably, the result of untoward circumstances, the improvement of which would raise them to the same rank as their more favored kindred and neighbors the Comanches. Whether these circumstances are to be favorably changed, as the tribes of these altitudes are brought

into closer communication with our settlements, is a matter of uncertainty, and has been doubted by observers. That the climate is not itself forbidding to an alpine industrial population is proved by the success of the Mormons. Portions of the Alps and other highland or mountain areas of Europe, less favorable to human life, are the residence of a fixed population. The cereal grains, in the opinion of travellers and explorers, whose testimony is now verified, can be raised in the great area of the Salt basin. Sheep, goats, and cattle, would thrive upon the rich bunch grass of the sloping steeps, where the disintegrated volcanic detritus has produced a soil. The expansive power of frost is perpetually lowering those altitudes. The entire summit abounds in pure water and a healthful atmosphere, and a high summer temperature at noonday. Rains are not wanting, though they are, perhaps, too unfrequent, and there seems to be no insuperable obstacle, so far as is known, to the formation of settlements at detached and favorable points between the arid and rocky areas, where the arts and comforts of life could be successfully and permanently relied on. The dryness of the atmosphere, which has been noticed as unfavorable to agriculture, without irrigation, is not found, however, to prevent the growth of grass in auspicious locations. To a region thus favorable, in a measure, to pasturage and grazing, the existence, in abundance, of rock salt must prove an inestimable advantage.

As the Shoshonee and Utah nation, who are thus set down in our path westward, is destined to come into an almost immediate intercourse with the United States, and the government seeks to perform its duty towards them in the best possible manner, efforts have been made to obtain the latest and most authentic information respecting them, and the character of the wide and elevated regions they inhabit.

Lewis and Clark, to whom we are indebted for our first notice of this nation, found them, under the name of Shoshonees, in the valley and at the source of the Jefferson Fork of the Missouri River, which heads, agreeably to their observations, in latitude 43° 30′. Their old encampments and battle-grounds, where they had been assailed and defeated by their enemies, the Pawkees, or Minnetaries, had been passed as far north as the mouth of the Jefferson, in latitude 45° 24′. This tribe, who numbered about 400 souls, were found to possess horses. The Shoshonees formerly lived, agreeably to their own recollections, in the plains, but had been driven by roving Indians of the Saskatchawine into the mountains, from which they then rarely sallied. This band was deemed a part of the great tribe of Snake Indians; they were found not only on the highest altitudes, but on both sides of the Rocky Mountains. On the west of the mountains, they occupied the head-waters of the Lewis River, where they subsisted, in part, on salmon. The whole number of the nation speaking dialects of the Shoshonee language, was vaguely estimated at that date, (1806,) in their table of Indian population, at 13,600. They were found scattered, under various names, over many degrees of latitude and longitude. When first found by these intrepid explorers on the spurs of the Rocky Mountains, they employed the expression of *Ah-hi-e!* to signify

pleasure at the sight of a white man. Their name for a white man was, however, *Tabba-bone*; expressions denoting a peculiar language.

"Their cold and rugged country," observe the explorers, "inures them to fatigue; their long abstinence makes them support the dangers of mountain warfare; and worn down, as we saw them, by the want of sustenance, they had a fierce and adventurous look of courage. They suffer the extremes of want; for two-thirds of the year they are forced to live in the mountains, passing whole weeks without meat, and with nothing to eat but a few fish and roots. Nor can anything be imagined more wretched than their condition when the salmon is retiring, when roots are becoming scarce, and they have not yet acquired strength to hazard an encounter with their enemies. So insensible are they, however, to these calamities, that the Shoshonees are not only cheerful, but even gay; and their character, which is more interesting than that of any Indians we have seen, has in it much of the dignity of misfortune. In their intercourse with strangers, they are frank and communicative; in their dealings perfectly fair, and without dishonesty. With their liveliness of temper, they are fond of gaudy dresses, amusements, and games of hazard, and, like most Indians, delight in boasting of their martial exploits."

Such is the account given of the most northerly tribe of this people, who have not been visited since. Of the tribes living south of them on the same high altitude of mountains, far less favorable accounts have been given. Mr. Hale, the ethnographer of the United States Exploring Expedition, takes but little notice of this leading nation of the mountains, their relations, languages, or population; which is probably owing to their remote and inaccessible position. Frémont, who approached the mountains in north latitude about 42°, came among those bands of the Shoshonee stock who possess no horses, live chiefly on roots, and present the most depressed type of their condition. Accuracy, in relation to our knowledge of the topography of those regions, and, incidentally, of the tribes inhabiting it, begins with the exploratory journeys of this officer. He ascended the mountains from the north fork of the Nebraska or Platte, through the Sweet-water Valley, which carried him, by a gentle and almost imperceptible ascent, to the South Pass. Here, at an altitude of 7000 feet above the sea, in longitude 109°, and latitude a little north of 42°, he found himself amongst the Shoshonees, of whom he had observed traces in the Sweet-water Valley. He had now advanced 900 miles from Westport at the mouth of the Kansas. In his separate topographical sheet-maps, published in 1846, he inscribes the words "WAR-GROUND OF THE SNAKES AND SIOUX INDIANS," between the Red Buttes of the north fork of the Platte, and the junction of the Big Sandy Fork of the Green or Colorado of California. We are thus apprized of the fact that the Shoshonees or Snakes have bands of the great Dacota family for their enemies at the eastern foot of the mountains. The distance between the extremes of the two points thus marked is 192 miles; in passing

over which, but few Indians were met, but the traveller in these regions is obliged to keep on his guard, as the district is liable to the periodical inroads of both parties.

As the Sweet-water valley is probably destined to be the principal land route from the Mississippi Valley to Oregon, its geographical character and capacities for sustaining animals and men, may be appropriately mentioned. Frémont describes it as "a sandy plain 120 miles long,"—and again, as "a valley five miles wide, with a handsome mountain stream of pure water, its immediate borders having a good soil, with abundance of soft green grass." The valley is well defined. Its northern sides consist of "ridges and masses of naked granite, without vegetation." Its southern borders are crowned with the heights of the Sweet-water mountains. He was fourteen days, including necessary stops, in ascending from a little below its mouth to the summit of the South Pass, where he immediately fell upon the remote waters of the Colorado. The distance from water to water, was less than five miles. The ascent was easy, and the pass without peculiar difficulty.

Assuming the Snake or Shoshonee territories to begin at the mouth of the Sweet-water, which is probably as far east as they ever venture in war, the people speaking dialects of this language, spread over the entire summit of the mountains to and down the Snake River or Lewis' fork of the Columbia, to latitude about 44° 30′"—say, the dividing highlands between the Burnt and Powder River of Lewis' fork, where they are, for the last time, noticed. This point is about 650 miles below Fort Hall. The entire distance from the mouth of the Sweet-water, taking the admeasurements from Frémont's sheet-maps, through the Bear River Valley, may be computed to be 750 miles. About 280 miles of this distance lies across the extreme summit of the mountains, from the Table Rock to Fort Hall, and with the eastern moiety of 140 miles, to the foot of the dividing ridge between the waters of the Colorado and Bear River, consists of sandy plains covered with artemisia and a few alpine shrubs. The western moiety of 140 miles beyond that ridge, consists of the minor bristling spurs of voleanic formation, through one of the ancient fissures in which the Bear River winds its way till it pours its tribute southerly into the Great Salt Lake. This lake lies in a high geological basin, which has no outlet by rivers to the sea, but it parts with its surplus water like the inland streams of Asia and Africa, exclusively by evaporation.

North and south of this great line of demarcation of the Southern Pass—through which, population seems destined in our future history to pass—the Shoshonee nation, under its various names, extend as far north as the sources of the Missouri, and the mouth of Jefferson Fork, in latitude 45° 24′. South and west of the Pass they embrace the plains of the Great Salt Lake basin, now incorporated into Utah, and extend into California, Arkansas, and a part of Texas. Those of them who have descended eastwardly into the Texan plains, at unknown periods of their history, are known as Comanches—a relation which is designated by the ethnological tie of language.

Dismissing the latter tribe, who, probably, owing to the possession of the horse, and living on animal food abundantly supplied by the buffalo, have acquired a distinct tribal standing for themselves, and regarding the Shoshonees as mountaineers, who derive their best protection from their inaccessible position, it may be doubted whether a more impoverished, degraded, and abject Indian nation exists in North America. This character does not apply as fully to the Snake Indians, who occupy the upper part of the valley of the Shoshonee or Lewis' fork of the Columbia. These latter tribes are periodically subsisted on salmon, coming up from the Pacific, which are abundantly taken at the Falls; but at other seasons they have little to distinguish them from the mountain bands. The country they inhabit is, for the most part, volcanic, with dry and arid sand plains, forming intervening tracts between the pinnacles of rock, which are unfavorable to the increase of large game, and yield but little game of any kind. As the Snakes have no agricultural industry, they are doomed to suffering and depopulation, with the mass of the Indians of Oregon. Even in the most favorable and healthy seasons, they have so little physical stamina, that the prevalence of fevers, common east of the mountain, has been known to prostrate them with the power of an epidemic, or a pestilence.

Recent information of the Shoshonees, viewed in all their extent and divisions, depicts them as doomed to certain depopulation and extinction, unless this doom be arrested by a resort to fixed means of industry. Too often, nay, uniformly, the advance of civilized nations into the territories of barbarous tribes, has the effect to cause depopulation, from the great stimulus to trapping, which adds to their means of enjoyment. But not so with them. Their country is bare of the fur-bearing animals. The little resources they possess in fish and game, are, as it is seen, quickly wasted. Their habits and manners are soon corrupted, and the native vigor of the tribes is prostrated, just at the time that their spontaneous means fail, and they are required to begin a life of agricultural industry, to save themselves from extinction. Perhaps mountains and rocky shelters, and a sparse population, spread over an immense area, which is doomed to perpetual sterility, may operate to lengthen out the period of these feeble and depressed, but docile and friendly mountaineers.

In any future purchases from this tribe, with a view to facilitate intercourse between the Mississippi Valley and California and Oregon, or to protect the Mormons and other incipient settlements on the mountains, the value of the Bear River cannot fail to attract attention. This valley lies for 80 miles east to west, directly in the route to Fort Hall, and appears to furnish many of the requisites for a mountain population. This river is the largest known tributary to the Great Salt Lake. It is connected with the geographical system of rivers and creeks of that basin, where agriculture has already commenced. It is represented by Frémont as forming "a natural resting and recruiting station for travellers, now and in all time to come. The bottoms are extensive, water excellent, timber sufficient, and soil good and well

adapted to the grains and grasses suited to such an elevated region. A military post and a civilized settlement would be of great value here, and cattle and horses would do well where grass and salt so much abound. The LAKE will furnish exhaustless supplies of salt. All the mountain-sides are covered with a valuable and nutritious grass, called bunch grass, from the form in which it grows, which has a second growth in the fall. The beasts of the Indians[1] were fat upon it; our own found it a good subsistence, and its quantity will sustain any amount of cattle, and make this truly a bucolic region."

Mr. Nathaniel J. Wyeth, whose replies to some of our queries respecting this people we subjoin, spent a number of years in the adventurous Indian trade west of the Rocky Mountains. Between 1832 and 1836, he was an agent, or factor, of the Hudson's Bay Company, and built Fort Hall on the head waters of the Lewis, called Snake, or Säaptin River by the natives. This gentleman, who is now a resident of one of the New England States, exhibits, in the responses with which he has favored us, a habit of close observation, which has enabled him, with the aid of his journals, to reproduce the various bands of the nation of whose characteristic traits and habits, and the natural features and productions of the country they inhabit, we seek to be better informed. We need do but little more than ask a candid perusal for his statements.

The object in hand, has been to obtain accurate and reliable accounts of the country over which the Shoshonee language prevails, in all its latitudes and longitudes; the number of bands into which the nation is divided; their actual means of subsistence; their wars and alliances with neighboring tribes; their disposition and feelings towards the United States; and the true policy to be pursued respecting them.

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[1] This is the first and only intimation we have, that the Indians *have* "beasts."

3. INDIAN TRIBES OF THE SOUTH PASS OF THE ROCKY MOUNTAINS; THE SALT LAKE BASIN; THE VALLEY OF THE GREAT SÄAPTIN, OR LEWIS' RIVER, AND THE PACIFIC COASTS OF OREGON.

BY NATHANIEL J. WYETH, ESQ.

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LETTER I.

Cambridge, Mass.
March 27, 1848.

SIR:

Your letter of 21st February ult. was received while I was wholly occupied by the operations of business. I beg you will accept this as an apology for so late an answer.

I observe that the information to be elicited was to have been used by the 1st February or during the present session of Congress — can it still be useful? if so, I will furnish a few remarks in answer, premising that I commenced the Indian trade in 1832, and left it in 1836, that my travels were from 40° to 49° north, and from the Rocky Mountains to the Pacific, having my chief establishments at Fort Hall and Wapato Island, and that it will take some little time to collect the facts from the original memorandums.

Very respectfully,
Your Obedient Servant,
NATHANIEL J. WYETH.

HENRY R. SCHOOLCRAFT, ESQ.,
Office Indian Affairs.

LETTER II.

April 3d, 1848.

SIR:

I have received your ethnological questions, accompanied by your letter of the 21st of February last. Circumstances have prevented my attention to the subject until this time.

In imparting what little I know, I shall follow the order in which the questions are proposed; omitting those on which my information is deficient. No. 13, "Causes of the Multiplication of Tribes."

In my intercourse with the bands of Snake Indians at Fort Hall, which I built in 1834, and while endeavoring to communicate with them for the purposes of trade, my attention was struck by the diversity of dialect; not great enough to lead to the supposition of a very ancient separation, and yet too great to exist between tribes inhabiting the same region. The very limited inquiries that I was able to make, led to the belief that the tribes or bands of Snakes recognised a less difference between each other, than between themselves and the Blackfeet and Crows, with whom they are always at war.

During these years, the few whites then in that region called the more miserable bands Diggers, or Shoshonees. They differ from the other Snakes somewhat in language; their condition is much poorer, having no horses, and living chiefly on roots and fish from the brooks, with what small game that region affords. I am not quite certain, but think their distinctive name among the natives is SOHOSHONEE; another division of the Snakes are called by themselves and others, Bonacks, or Paunaques. They do not seem, radically, to differ from the former; they are more intelligent, and better supplied with all the means of Indian independence; horses, lodges, guns, knives, &c. &c., and form bands annually to hunt in the buffalo country.

The region which both these descriptions of Snakes inhabit, extends south from the Säaptin or Snake River, as far as the southern end of the Great Salt Lake, and from the Rocky to the Blue Mountains, and is nearly a desert; although there are a few spots of good soil, it produces the least possible quantity of game. There are no buffaloes; elk and deer are very scarce and unknown, except in the mountains. Antelope and big-horn are rare, as also the bear; there are two kinds of rabbits, but they are also scarce. In 1832, when I first visited this country, perhaps the beaver and otter exceeded all the other game, and they were by no means abundant; at that time the Indians had no traps, and therefore could obtain little food from the beaver. All the skins of animals killed were used as clothing, even the beaver and otter, and furnished so little, that perhaps not more than one-half of their bodies were covered, even during the winter, and but few even of those who visited annually the buffalo region had skins enough to erect lodges.

The paucity of game in this region is, I have little doubt, the cause of the almost entire absence of social organization among its inhabitants; no trace of it is ordinarily seen among them, except during salmon-time, when a large number of the Snakes resort to the rivers, chiefly to the Fishing Falls, and at such places there seems some little organization; some person called a chief usually opens a trade or talk, and occasionally gives directions as to times and modes of fishing; and the same is the case with the bands who go into the buffalo region. Other than this, I have perceived no vestiges of government among them; I have never known other punishment inflicted than personal satisfaction by murder or theft.

At the time I allude to, our means of communicating with them were very imperfect, and mistakes of their meaning might occur. Their first answer to the question of "What is the difference between the Bonacks and Shoshonees?" if addressed to one separate from the other, was, that they were good and the other bad, meaning that they would trade beaver with the Whites, while the other would steal from and murder them. When they were addressed together they did not, generally, implicate each other, but in all cases it was difficult for them to conceive that we were searching for the distinctive difference between themselves; and, after making this understood, I could never obtain any further information than that the Bonacks had horses, and went to hunt buffalo, while the Shoshonees had no horses, and lived on roots and fish.

In examining the cause of separation into tribes of a people so little removed from the lowest state of existence, we should examine the original necessities which must have produced all social organization. The collection of a family, which may be considered coeval with individual existence, is of no importance in this instance. The combination for the defence of person and property is the point to be examined in this case, and beyond this stage the Snakes have not reached.

Previous to the introduction of the Horse among them, they could have had no interest of property requiring organization to protect it, except that of the Salmon fisheries, which must have been nearly coeval with their first settlement in the country, and which, naturally, would call for some kind of law to render it available. That this was their only motive to institute government, I infer from the nature of their country, which is too poor to produce any considerable quantity of game, and that no cultivation had ever been attempted. It is not probable they would have combined to protect property they did not possess, or to secure themselves against enemies who could not penetrate into their country for want of subsistence, and also because themselves could not remain together in any considerable numbers from the same cause.

These reasons show a want of motive and power of combination, except in the single interest of the Salmon fishery, and convince me that prior to the introduction of the horse no other tribal arrangement existed than such as is now seen in the management of the Salmon fishery.

Since the introduction of horses, the Snakes have probably been in the progress of separating into two tribes, those who had most intelligence would obtain them first, by the mode of all Indian acquisition, stealing, gambling, and trading.

It is a well-established fact that men on foot cannot live, even in the best game countries, in the same camp with those who have horses. The latter reach the game, secure what they want, and drive it beyond the reach of the former. Thus the Snakes, while they had no horses, would form but one people, because they would be collected once a year, in Salmon time; but the organization would be very imperfect, because the remainder of the year would be spent by them in families widely spread apart, to eke out the year's subsistence on the roots and limited game of their country.

After a portion of them, who are now called Bonacks, had obtained horses, they would naturally form bands and resort to the Buffalo region to gain their subsistence, retiring to the most fertile places in their own, to avoid the snows of the mountains and feed their horses. Having food from the proceeds of the Buffalo hunt, to enable them to live together, they would annually do so, for the protection of their horses, lodges, &c., &c. These interests have caused an organization among the Bonacks, which continues the year through, because the interests which produce it continue; and it is more advanced than that of the other Snakes.

LETTER III.

April 6th, 1848.

SIR:

The few observations on the "multiplication of tribes," accompanying this, are not satisfactory to myself, and if not so to you, please throw them aside.

I regret not being able to supply more facts to support a view, very strongly impressed on my mind, that the condition of the Indians of this continent has been much influenced by the introduction of the Horse.

I shall notice the other questions, and, with your leave, communicate such views and facts as I may possess in regard to any of them.

LETTER IV.

April 18th, 1848.

SIR:

These remarks relate to the geography, &c., of the Snake country, which is drained by the Säaptin or Snake River.

This country, with small exceptions, is volcanic. The action of fire is extensively perceptible. Columns of basalt generally form the barriers of the streams.

The streams almost invariably diminish toward their outlets, and many of them discharge no water, except at high flood, and some of them sink in the rocks and sands at all seasons, between Henry's fork and the River Malad, a distance of about 150 miles. On the north side of Snake River, all the streams are lost in this manner,

although the streams issuing from the contiguous mountains are as abundant and large as on the eastern side of the same range. The streams of this region are unfit for navigation of any kind, with the exception of the Main Snake and Salmon Rivers, both of which afford the worst kind of canoe navigation, rapids being frequent, and portages necessary at different places, according to the stage of the water.

All the streams of any considerable magnitude afford abundance of mill-power. At a place about 70 miles from the mouth of Bruneau a jet of hot water issuing from the basaltic rock, about 40 feet above the bed of the stream, is sufficient to carry the largest mills, and many jets of hot or cold water, at different heights above the stream, are thrown into Snake River between Malad and Henry's Fork.

Salmon ascend the main river to the Fishing Valley, and by Salmon River nearly to the Rocky Mountains, and by the other lateral branches to their sources.

The rivers of this country, which come from the South and West, rise in April and May, and those of the North and East, in June and July. From August to April the waters are low in the main river. I have forded Snake River at the mouth of Big Wood in August, 1834, and in December, 1835, without wetting packs. The streams are divided on the East and North from the Rocky Mountains, on the North-west from the dividing mountains between them and the Flathead River, on the West from the Blue Mountains, on the South from a range which divides them from the waters of the Valley of the Salt Lake. Hot springs are common all over this region, but there are no lakes or ponds.

I have observed fossil-wood on the Oyhee, which discharges into Snake River nearly opposite the Big Wood. On the heads of Goding Fork, which loses itself in the plain of the Three Butes; in Pierre's Hole, at the base of the Three Titons, about thirty miles up the Brulè; and on the heads of Salmon River, I have observed blue limestone and reddish sandstone, but have not observed the remains of shells in either. On Bruneau I found asphaltum in a solid form, and on one occasion made camp-fires with it. I have found good bituminous coal on the west side of the Rocky Mountains. On a branch of the Colorado, and on the east side on a branch of Wind River, which locations are immediately South and North of the heads of the Snake River, I have little doubt of its existence at the heads of the streams issuing into this valley from the mountains.

Glauber, Epsom, and common salt are found, occasionally, where waters have evaporated, and rock salt is found in the mountains which divide the valley from that of the Salt Lake. Crystals of salt were shown me by one of my men, which he said he picked up on Big Wood River, where it issues from the Basaltic Rock, but, from the appearance of that place, I judge it was not near the place of its formation. At Fort Hall, salt was traded from the Indians sufficient for seasoning the meats eaten there, and by the trappers and traders sent from the post. Obsidian, of which the Indians make knives and arrow-heads, is common.

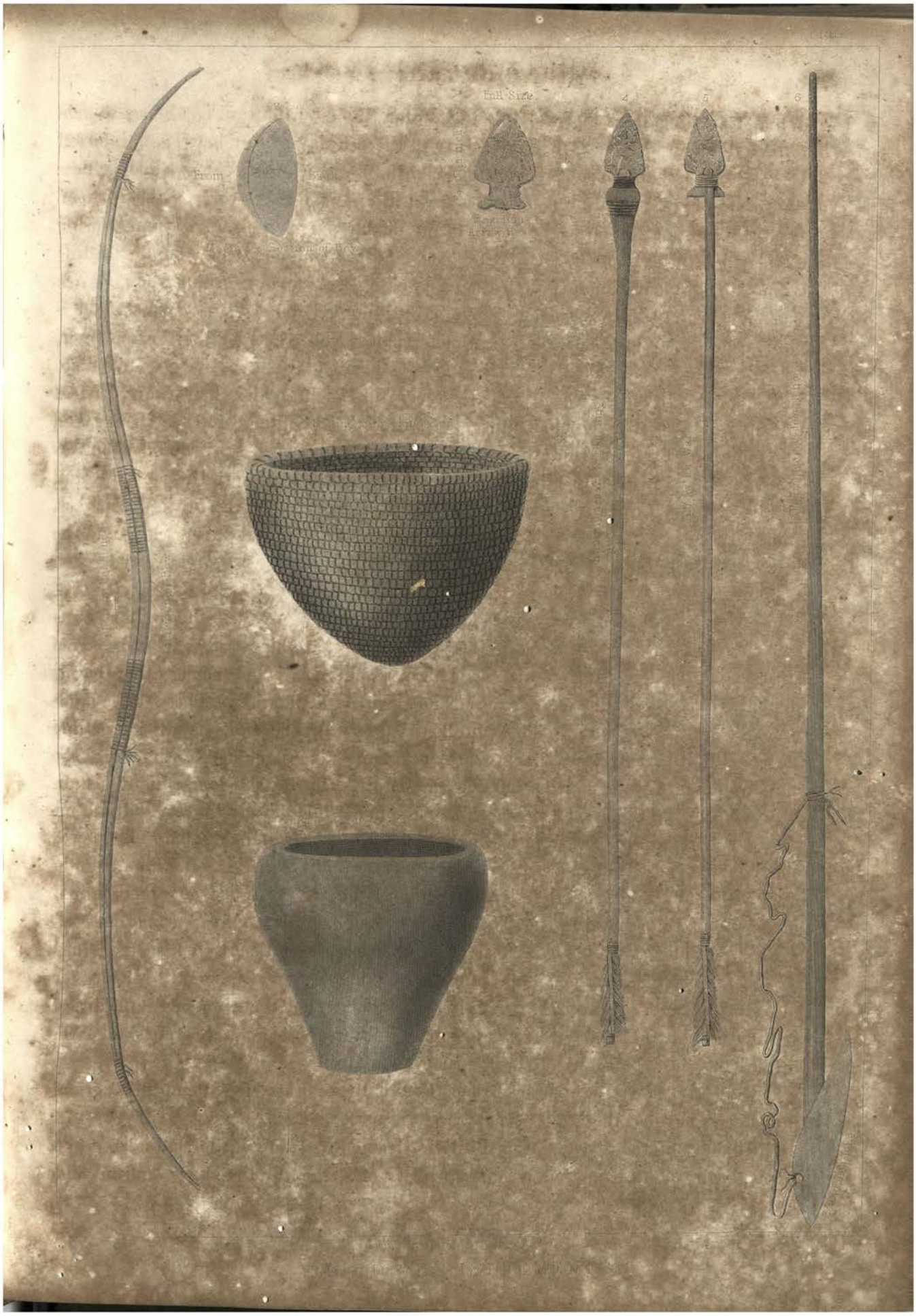
While travelling from Pierre's Hole to Powder River by the trail on the south side of Snake River, from the 24th day of July to the 4th day of October, 1832, rain fell but twice, and probably not more than one-eighth of an inch each time. The dryness of the atmosphere, at this time, was so great that on Raft River, on the 15th of August, I could not discharge one barrel of my double percussion gun without causing the other to explode from the slightly increased heat. One man was wounded in this way, and guns several times exploded, and I was obliged to discontinue the practice of placing caps on the guns, in the day-time, until immediately wanted for use.

On the heads of Portneuf, on the 10th of August, 1832, I noted the thermometer, at sunrise, at 18° above zero, and the noon following, at 92°. In the immediate valley of Snake River the variation is less, but still much greater than in any part of the United States. I find noted in my journal, 11th of September, 1832, being then at the mouth of Bruneau, that the average difference between sunrise and noon was as much as 40°. In 1835, while travelling from Big Wood to Fort Hall, by the trail on the north side of Snake River, from the 18th of November to the 5th of December, it rained two days and snowed one, at both times heavily, and during this time the average of the thermometer, at sunrise, was 8½° above zero. Its greatest variation was from 7° below to 38° above zero.

This country has ragged mountains for the boundary of its valley, the higher points of which retain their snow most of the year. There are high and extensive barren plains or table-lands, covered with artemisia, prickly-pear, and some other plants common to excessively dry and barren regions, with a little grass. These table-lands are nearly destitute of water. They are bounded by the mountains on all sides, being intersected by these streams, which appear to occupy fissures formed by the shrinkage when an immense sea of lava cooled down to basalt. These table-lands might sustain sheep and goats to a limited extent. They are unfeasible for any kind of cultivation near their mountain border, from the extreme coldness of the nights; and elsewhere, from the same cause, superadded to extreme dryness and poverty of soil. The bounds between the table-land and the river or bottom land, are generally very precipitous, and mostly of columnar basalt. The bottoms are generally confined, sometimes of good soil, but almost always too dry to produce strong vegetation, except near springs and other moist places, which are rare, or of small extent; frequently salts cover the soil and render it barren, but with irrigation, for which there are great facilities, agriculture might be conducted so as to supply military posts and emigrants, together with what would be required for a sparse population.

The valley of Fort Hall is the best portion of the country for attempting agricultural operations for the supply of its eastern part.

The valleys of the streams from Brulè to Grand Ronde are fertile, and adequate to supply, with slight irrigation, a large quantity of agricultural products, and in some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places no irrigation would be required; and the neighboring plains and mountains afford fine grazing for horses, cattle, sheep, and goats.

The mountains of this valley alone produce wood; elsewhere it is rare to find timber large enough to make a gun-stock; but there is a little cotton-wood on the borders and islands of Snake River, at and above Fort Hall, and some on Big Wood River. The Blue Mountains have abundance of good building timber in the vicinity of good land. One great want of this region will be fuel.

The Indians, so far as can be ascertained, have never planted a seed; nor is it known that they ever had any kind of metal before they were visited by the whites, or that metals exist in the country.

LETTER V.

April 23d, 1848.

SIR:

The utensils originally used by the Indians of the valley of the Säaptin or Snake River, were wholly of stone, clay, bone, or wood. So far as I observed, they possessed no metals. Their implements were the pot, bow and arrow, knives, graining tools, awls, root-diggers, fish-spears, nets, a kind of boat or raft, the pipe, mats for shelter, and implements to produce fire.

The pot most commonly used was formed of some kind of long tough roots, wound in plies around a centre, shortening the circumference of the outer plies so as to form a vessel in the shape of an inverted bee-hive. (See Plate 76.) These plies are held together by a small tough root passed through a space made by forcing an awl between the two last plies, and winding the root under the last, and over the one to be added in the progress of formation, being careful to force enough of these thread-like roots between the two last plies to make the vessel water-tight. This pot is used for a drinking-vessel, as well as a boiling implement. With it, the latter operation is performed by heating stones and immersing them in the water contained in it, until the required heat is attained, and the contents, chiefly fish, cooked, producing a mess mixed with soot, ashes, and dirt. The Squaws, when moving camp, generally put these pots on their heads, probably more for the convenience of carrying, than with the idea of a hat, which was an article otherwise unknown to them. I have also seen among these Indians a stone pot, holding about two quarts, made of pure lava, and shaped much like the black-lead pot used in melting metals, (See Plate 76,) and think it would stand fire to be used as a boiling-pot, but have never seen it so used, or in any other way. It might have been used to pound seeds, hawthorns, choke-cherries, and service-berries, which these Indians, after pounding, make into cakes and dry for food. These last pots are very rare, and it must have been a great labor to make one. The first kind of pots were common to the Indians at the mouth of the Columbia, as well as the mats.

The bows which I have seen were made of the horns of the mountain sheep and elk, and of wood, and are the best specimen of the skill of these Indians. When of horn, they are about two feet ten inches long, and when unstrained have a curve backwards. They are of two parts, spliced in the centre by sturgeon glue, and deer-sinews, wound around a splice. The horn is brought into shape by heating and wetting, and worked smooth by scraping with sharp stones, and being drawn between two rough stones. A cross section of the bow would show the back side less convex than the front. (See Plate 76.) At the centre, where the bow is spliced, before winding the splice, two deer-sinews, nearly entire, are strongly glued and secured by their butt-ends; the small ends of them being outward at the ends of the bow. Where they are strongly wound and secured, these sinews cover the whole width of the back of the bow. As a matter of ornament, the skin of a snake, commonly that of the rattlesnake, is glued externally on the back of the bow. The string is of twisted sinew, and is used loose, and those using this bow require a guard to protect the hand which holds it. Altogether, it is one of the most efficient and beautiful bows I have seen.

The head of the arrow is formed by breaking pieces of obsidian in small parts, and selecting those nearest the desired form. In this selection, those of the right thickness are taken. In finishing them, every edge of such a piece is laid upon a hard stone, and the other struck with another hard stone, varying the direction and force of the blow, to produce the desired result. It is an operation which requires skill, and many are broken when nearly finished, and thrown away. When formed, it is about three-fourths of an inch long and half an inch wide, and quite thin, and for hunting purposes formed as is shown in Plate 76. It is attached by inserting its near or shaft end in a split in the front arrow-end of the shaft, and wound with sinews in such a manner as when the shaft is drawn from an animal, the head is withdrawn also, and the increased width just at the near end of it, is intended to secure this result. The arrow-heads used for warlike purposes, are formed without this increased width, so that when the shaft is drawn out the head will be left, to increase the mischief. It is said they poison these arrows, but I do not know the fact. They sometimes appear to have been dipped in some dark-colored fluid, which has dried on them.

The shaft is about two and a half feet long, and generally made of a shrub which the hunters call grease-bush. This is a small bush like the currant, and is nearly as hard as box-wood. It is very applicable to the steaming process, and is made straight by wetting and immersing in hot sand and ashes, and brought into shape by the hand and eye. To reduce the short crooks and knobs, it is drawn between two rough grit stones, each of which has a slight groove in it, and coarse sand is also used to increase the friction. An arrow-shaft, finished, appears as though it had been nicely turned. The arrow is used without a notch, and is feathered for about five inches near its rear

end, leaving space behind, just enough for the operator to grasp it in drawing the bow. These feathers are stripped from the sides of a suitable quill, and placed on the shaft in a form a little winding, but quite similar to the position they occupied on the quill. It produces the effect of keeping the tail of the shaft exactly in rear of the head, and also a rotary motion on its axis, whereby the exactitude of its course is maintained.

The knives I have seen are rude instruments produced by breaking pieces of obsidian, which has a tendency to form sharp edges, like glass, and is common in the country; and selecting those pieces which approach the desired form, and having a sharp edge, this implement is often used without any other preparation, but sometimes a wooden or horn handle is attached, in the same manner as the shafts of the arrows.

The graining tools for preparing skins, were ordinarily made of bone, using such as had a hard enamel outside, and were softer within. Sometimes obsidian was used for this purpose secured to the staff.

Awls were made of bone rubbed to a sharp point, and also large thorns.

Root-diggers are crooked sticks, the end used in the earth being curved and sharpened by putting it in the fire and rubbing against a rough stone, which both points and hardens them; they are also made of elk and deer horn, attached to a stick. They are used to obtain some small roots which the country produces, such as kama, souk, yampas, onions, tobacco-root, &c.

The fish-spear is a beautiful adaptation of an idea to a purpose. The head of it is formed thus, (See Plate 76); and is of bone, to which a small strong line is attached near the middle, connecting it with the shaft, about two feet from the point. Somewhat toward the forward end of this head, there is a small hole, which enters it ranging acutely toward the point of the head; it is quite shallow. In this hole the front end of the shaft is placed. This head is about two and a half inches long, the shaft about ten feet, and of light willow. When a salmon or sturgeon is struck, the head is at once detached by the withdrawal of the shaft, and being constrained by the string, which still connects it with the operator, turns its position to one crosswise of its direction while entering. If the fish is strong, the staff is relinquished, and operates as a buoy to obtain the fish when he has tired down by struggling. These Indians are very expert in the use of this instrument, and take many fish at all the falls and rapid waters, and construct, on small streams, barriers of stones or brush, to force the fish into certain places, where they watch for them, often at night with a light.

Fish-nets are made with the outer bark of some weed which grows in the country, but I took no particular note of what it was, or how separated from the stalk. It makes a line stronger than any of those I had among my outfit, although they were selected from the best materials of an angling warehouse by myself, who profess to be a judge of such articles. The twine is formed by laying the fibre doubled across the knee, the bight towards the left, and held between the thumb and finger of that hand,

with the two parts which are to form the twine toward the right and a little separated; rolling these two parts between the knee and right hand, outwardly from the operator, and twisting the bight between the thumb and finger of the left hand, forms the thread. More fibre is added as that first commenced on diminishes in size, so as to make a continuous and equal line. In this way, excellent twine is made much more rapidly than could be expected. The nets are of two kinds: the scoop, which is precisely the same as is used in the United States; and the seine, which is also in principle exactly the same; and the knot used in netting also appears to me exactly the same: but in this I may be mistaken, as I have never seen the operation performed. The leaded line is formed by attaching oblong rounded stones, with a sunken groove near the middle in which to wind the attaching ligature. Reeds are used for floats.

Boats or Rafts.—The navigation of this region appears to have been confined to crossing the streams when the water was too cold for comfortable swimming. The only apparatus used was little more than a good raft, made of reeds which abound on many of the streams. They are about eight feet long, and formed by placing small bundles of reeds, with the butt-ends introduced and lashed together, with their small ends outwards. Several of these bundles are lashed together beside each other, and in such a manner as to form a cavity on top. There is no attempt to make it tight; the only dependence is on the great buoyancy of the materials used. It is navigated with a stick, and almost entirely by pushing. This rude form of navigation, apparently, is the only one ever used in the country, in which, in fact, there is hardly timber enough for a more improved form.

Pipes are used with a stem, usually about two feet long. The bowl is sometimes made of fuller's earth, and also of soapstone.

Mats are made from large rushes, in a manner which appears to me to be the same by which the Chinese make similar fabrics. They are used to sleep on, and to construct lodges. They are about four feet wide, and when carried are rolled up like a scroll.

These Indians produce fire by using a shaft similar to that of an arrow, about three-eighths of an inch in diameter, and two feet long; one end of which is bluntly pointed, and placed in a shallow hole in a hard, dry piece of wood. One of the operators takes it between his opened hands, near the top, and rolls it between them back and forth, forcing downwards, and when his hands approach the lower end, another seizes it in the same manner; and thus the attrition is maintained until fire is produced. It is performed with great quickness and dexterity; but it is hard work, and few whites could perform the feat.

LETTER VI.

May 1st, 1848.

SIR:

Yesterday I received your letter of the 25th of April.

Herewith is my fourth and last communication relating to that portion of the continent drained by Snake River; unless you deem it proper in me to suggest measures for the improvement of the Indians in connection with establishing a suitable route to the more important regions beyond, which are to be controlled by this government.

I may find in my records some small matters relating to the valley of the Salt Lake, that of the Colorado, Spokan, or Flathead Rivers, or the region enclosed between the Blue and California Mountains, and between the latter and the sea. Will you please advise me as regards the above.

I have attached much importance to the Snake country, as being the road to Oregon and California.

LETTER VII.

May 1st, 1848.

SIR:

I know very little of the language of the Shoshonees, and the following very limited list may not be correct; for instance, it seems impossible that the meat and fish knife could have the same name, as, in a rude form, they were both in use among them; and the name of the mule looks as if it were derived from Mexico; and the word for pantaloons and buffalo robe is the same. Probably they could have had no original name for an article they did not possess.

It is difficult for persons not better educated than Indian traders usually are, to represent by English letters the true sound of Indian words; beside which, the Indians differ much in the pronunciation of the same word. Another difficulty is, that when interrogated, Indians almost always answer "yes" to a leading question, which deceives those who are unused to them and the proper method of examination.

In 1832, when I first went among the Shoshonees, we wished to know the name of the beaver, but could not succeed for several days. At last one of my trappers said he had learned it from an Indian, and that it was "bonaque." Subsequently we learned that this was a tribal name for a division of the Snakes. A writer calls one of the streams entering the Willamette the "Claxter," but I could never find a stream by that name, and came to the conclusion that the person who obtained it asked a question which was not understood, and the Indian very naturally said "Claxter," or "What?" or "What do you mean?" which is the meaning of the word in the country referred to.

Beaver	Harnitze.
Muskrat	Pauitze.
Salmon	Arki.
Mule	Mourah.
Horse	Tohuech.
White Men	Tarbabo.
Bear	Wearabze.
Fish-hook	Natzoon.
Clasp-knife	Harbeteze.
Awl, or Fish-knife	Wehe.
Beaver-trap	Harnitzeoon.
Tin Basin, or Pot	Wetour.
Pipe	Parm.
Bridle	Auke-wa-nuss.
Gun	Peait.
Saddle	Narrino.
Whip	Neutequar.
Powder	Nargotouche.
Beads	Puetzo-mo.[1]
Long Shells	Tawacar.
Hatchet	Hohanic.
Grass	Shawneep.
Tobacco	Too-parm.
River, or Water	Paah.
Sun	Tarpe.
Moon	Uphuie.
Shirt	Wanup.[2]
Waistcoat	Too-wa-nup.
Buffalo Robe	Cootche.
Trowsers	Cootche.
Great-coat	Toshi-wanup.
Moccasins	Maunep.

These Indians nearly starve to death annually, and in winter and spring are emaciated to the last degree; the trappers used to think they all eventually died from starvation, as they became old and feeble. In salmon-time they get fat. In my wanderings I have never seen any of them remaining, and do not know how they

[1] These are called Hiaguoio on the North-west Coast, and are there a medium of trade.

[2] Probably the word for clothing.

dispose of their dead; many believed they were cannibals, but I have no evidence of this fact.

In the portion of this country which is not destitute of game, they pound the bones of the animals they kill fine, and after they are boiled, eat a large portion of them.

These Indians, according to my experience, do not possess the feelings of revenge or gratitude in as great a degree as the English race, and have almost none, as compared with the conceived notions of the original inhabitants of this continent. This discrepancy struck me forcibly when I first visited them, with no other knowledge of their character than I had derived from books. For anything I could see, they treated those best whom they most feared. A band of them who had wintered at Fort Hall and received much food and many presents, particularly from two hunters named Abbot and Deforest, who afterwards accompanied them on the spring hunt, murdered them for their equipment of horses, guns, traps, &c., although no quarrel was alleged to exist. At another time, for stealing some horses and traps, I gave one of them two dozen lashes at the flag-staff, and also took horses enough to pay for the property stolen; and he became afterwards a serviceable hunter, and brought many skins to the Fort.

Near Fort Hall, in 1834, there were plenty of buffalo, but soon after the Fort was established they disappeared from its neighborhood. The beaver disappeared next.

The origin of the Indians has employed so much ingenuity and learning, that it is almost useless on my part to make any suggestions. The difference of language and physical appearance leaves little doubt that they have come at several widely separated periods of time, and perhaps also from very different regions. Some of the Indians of the Valley of the Snake River have the aquiline countenance so common among the Crows, but a greater portion of them have the features of the Chinnooks and other Indians about the mouth of the Columbia.

In the winter of 1833 I saw two Japanese who had been wrecked in a Junk near the entrance to the Straits of de Fuca; and if they had been dressed in the same manner, and placed with the Chinnook slaves whose heads are not flattened, I could not have discovered the difference.

LETTER VIII.

May 20th, 1848.

SIR:

I have received your favor of the 12th inst. I shall not be able to give much information on any of the subjects you propose.

I did not commence with the valley of the Colorado, which is the first in the tramontane series, because I understood the inquiry to relate almost entirely to Indians, and this valley being decidedly a den of thieves, where every one keeps every other

at arms-length, I had no knowledge of its inhabitants, if those who infest it can be so called.

I now understand that the inquiry extends to the whole subject. What *has*, what *does*, and what *will* affect the Indian race or our own? To deduce a policy suitable to both, would it not be well to place my communications in the same order as the regions to which they relate are on the route to the Pacific?

I can only add a few words used by the Shoshonees.

Kay, or Tkay	No.
Kaywut	None.
Kayshaunt	Bad, or not good.
Shaunt	Good, or, perhaps, many: it commonly expresses good.

LETTER IX.

May 20th, 1848.

SIR:

I have passed several times through the country drained by the mountain branches of the Colorado of the West. Of that portion which is south of Brown's Hole, in about 41° north latitude, I know nothing from personal observation. The river below is said to be impassible, being filled with rapids, and occupying a mere crevice in the basaltic rocks, and the country a waste of sand and rocks.

The valley northward of Brown's Hole is occupied by the two main forks of the Colorado. Green River, in six branches, heads in the Rocky Mountains to the north of the South Pass, and near the Sweet-water of the Platte; and Grand River, which is the larger branch, heads in the mountains south of the South Pass, and with the Arkansas. These branches rise in the primitive and transition regions of the Rocky Mountains, but at the immediate base of these mountains the country becomes volcanic, and remains so as far south as I have visited it. These waters are in flood in June and July. There are runs of salt water, but whether there is any body of common salt was not known in the year 1836, but I have obtained it by boiling down a solution of the salts which whiten the earth in many places. I met with lignite in small veins, gypsum, and ancient marine shells, about 40 miles west of South Snake River, in latitude 40° 30′ north, longitude 108° west. On Elk and Metols Forks of Grand River, in latitude 40° 40′ north, longitude 107° west, I saw good bituminous coal in blocks in the streams, and cropping out from the sandstone on their banks. These positions were derived from dead reckoning from Fort Hall, the position of which had been previously ascertained.

While travelling from Sweet-water to Lewis' River, from the 23d June to 6th July, 1832, there was frost every night and snow several times.

Horses can be wintered at the Forks of Sandy, and on all the branches of Grand River, near the foot of the mountains, and at Brown's Hole, which last is a favorite spot.

This valley may be said to produce no timber, except in the verge of the mountains. On the heads of Green River, quaking asp, a kind of pine, and a kind of spruce, is found: on the heads of Grand River, in addition to these, pitch pine, box, alder, and scrub oak. Grass is barely tolerable on the heads of Green River, but is very fine on those of Grand River.

When I first visited this region in 1832, it was a fine game country. Besides Buffalo in the greatest abundance, there were Elk, Bear, Deer, Sheep, Antelope, and Beaver in great numbers. This abundance of game I attributed to its having always been a war-ground for the surrounding tribes. Neither the Indians, nor the whites, dared visit it openly, except in large camps, and the small marauding parties of Indians were in the habit of skulking in the high mountains, watching the country, to strike on any they might find unprepared, and their movements caused little disturbance to the game. From these causes the country could never have been closely hunted. I am uncertain if any Indians inhabit any portion of this valley, as being particularly their own, above Brown's Hole. If so, it is the Green River Snakes, whose village of 152 lodges, I met on the main fork of Grand River, on the 18th July, 1836. These Snakes appear to me to be of the same stock as those of Lewis River. They resemble them in physical appearance, but living in a better country, they are larger and better looking men, and appear more intelligent. Of their language I know nothing. I had no intimate intercourse with them. They were then mischievous, and would rob and murder if they had a safe opportunity. If they have any permanent home in this valley, it must be on the extreme south-eastern edge, where I have not been.

I have also met in this valley the Araphahoe village, and bands, or war-parties, of the Youta's, Crows, and Blackfeet, all of whom were bad neighbors.

The northern or Green River division of this valley, is unfit to produce anything, that I know of, for human sustenance, except such as may be derived from grazing. Horses, kine, sheep, and goats, may be sustained during the year, using the vicinity of the mountains in the warm months, and retiring south at the approach of cold weather.

The many fertile and warm valleys of Grand River would sustain, at all seasons, the same animals, and also produce wheat and many other articles suitable for food, and could be brought to sustain a considerable population.

LETTER X.

May 26th, 1848.

SIR:

I now send you a short notice of the valley of the Bear River. The recent information from Captain Frémont, obtained under more favorable circumstances,

renders what I might convey obsolete, and I allude to it only as an important position in the route to Oregon.

Of the valley between the Blue and Cascade Mountains, I speak more fully, because I think the importance of this section has not been properly stated.

In my next, I will indicate the means which I think should be used in establishing the route between the east and the west, and how it may be connected with the improvement of the Indian races who frequent or dwell in the countries through which it may pass.

I have no published map of these regions, except one by Colonel J. J. Abert, in 1838. If there is any, more recent, published by the government, I should be pleased to receive one. There have been so many names given to the streams of these remote countries, and so often the same name to different streams, that a map is necessary to identify them.

LETTER XI.

May 26th, 1848.

SIR:

The more recent exploration of the valley of Bear River, the main tributary of the Salt Lake, by Captain Frémont, with superior means, renders any extended notice of it, on my part, superfluous. It is one of the most important points in the route from the Atlantic, by the Platte, to the Pacific, by Lewis' River. The valley, a little above or below the Soda Springs, is eminently fitted for a military post. It is the most eastern residence of the "Diggers," who are the most likely, of the Indians in those regions, to form a nucleus in the social organization of their race; and the valley itself is well fitted for grazing and cultivation, and would produce abundance of horses, kine, sheep, and goats, and also abundance of salt to cure meats.

This valley is peculiar in one respect. Its outlet in the Salt Lake is remote from the most hostile and formidable tribes, while its southern and northern sides are defined by mountains impassable a considerable portion of the year, from snows, and at all seasons affording small facilities for the passage of cattle or horses. At the north-eastern extreme of its great bend, there are passes, but they are easily watched. A settlement here would be made secure from the inroads of all hostile Indians, and would have great facilities for producing the supplies most required in the neighboring regions.[1]

Buffalo were in great numbers in this valley in 1836, but must have disappeared, as well as the beaver, by this time. The mountain sheep were then plenty in the hills, and I presume are so now, as they breed where they cannot be easily disturbed. They were formerly taken in considerable numbers, where the deep snows of the mountains compelled them to visit the subordinate cliffs.

[1] This opinion has been remarkably verified by the success of the Mormon settlement, near that point.

Rain is frequent in this valley, but irrigation, for which there is abundant means, would be required for an extended agriculture. Formerly, I have seen the Utahs, Crows, and Blackfeet in this valley, but the Shoshonees are its true occupants. They live in the caves and mountains, and retire to their inaccessible haunts on the appearance of their enemies. Horses, kine, sheep, and goats could be grazed the year round, without other care than that of the herdsman, and the protection of a small military force.

I confine my remarks on the valley lying between the Blue and Cascade Mountains, to that part of it which lies between the Columbia and the heads of the small streams that enter it from the south. The Snake, or Digger Indians inhabit this region near the heads of these small waters; in winter living on the deer and other animals driven, by the snows of the mountains, within their reach; in more genial seasons, on roots and fish. Besides these, the Nézperces, Walla-Wallahs, and Cayouses visit this region. The latter I have met in large camps, in the winter, hunting deer, &c. These Indians, having plenty of horses, make an extensive surround,[1] within which the animals are retained by expert horsemen. Others are sent within the space to keep the game on the run; and after they are well tired down, the Indians commence the slaughter, for it is nothing else. In this manner I have seen many hundreds of animals killed at a single surround. The game is elk, bear, black and white-tailed, and big-horned deer, and a few antelopes. Beaver and otter were found in 1835, but may now be extinct.

The country is mostly a high, open, rolling prairie. Some of the streams have oak, alder, and cotton-wood; in the mountains there is red and white cedar, and three kinds of pine; some of the latter quite large, and for canoes I was obliged to select the smaller size of them.

The formation is volcanic; and where conglomerate sandstone is found, it is partly formed by the wreck of volcanic rocks. Pumice-stone is frequent. Columnar basalt bounds the streams, which appear to occupy chasms. The upper waters of the Des Schutes, or Fall River, runs, for miles, over a smooth bottom of white, soft stone, or indurated clay, which I have called "fullers' earth." Near this river are hot and warm springs in many places, and on a large scale at a place which I suppose to be the same as Captain Frémont's camp of November 29th, 1843. There, I observed the thermometer at 191° in one spring, and 134° in another; and at this camp I found, projecting from the perpendicular face of the conglomerate rock, underlying many hundred feet of solid basalt, two bones about the size of the thigh-bone of the horse. They were white and mineralized by flinty matter, which produced fire when stricken by the steel. These were the only remains of ancient animal life I ever saw on the waters of the Columbia, except a few shells on the heads of Salmon River.

[1] For using this word as a noun, local usage in the Indian country must, we fancy, be plead.

This valley abounds in fossil wood. In a slide from the mountain near the Cascades, I found a log of wood, one end of which had been mineralized so fully by some flinty matter that I produced fire from it with a steel. The other end was burnt in the fire so made.

The climate of this valley is warm in winter. On the 4th of February, 1835, frogs were croaking. Blackbirds remain through the year; and flowers may be found, in some part of it, during every month. Snows and rains alternate from September to March, in the plains, but the former are light, and do not remain more than one or two days; but in the immediate verge of the Cascade Mountains they are heavy. I was once subjected to a snow-storm on the heads of the Des Schuts, during which we judged six feet in depth to have fallen, and escaped only by building canoes and descending the river, the main stream of which does not freeze at any time.

The thermometer in the lower valleys of this region cannot range much, if any, below freezing, during any portion of the year; but I was not careful enough to note its indication.

This valley, throughout its whole extent, produces, generally, "bunch grass," which stands with the autumn rains, and remains green during the winter, drying like made hay in the dry season. It is in the highest degree nutritive.

There is a waste of rocks and sand near the Columbia, and on its immediate banks.

In this valley are chiefly reared the horses required in the immense region north of California, and west of the Rocky Mountains, and many of those used on the heads of the rivers this side of the mountains, which is sufficient proof of its grazing facilities. These animals are raised without shelter, and on the natural products of the country. The number must have been very great to supply the entire wants of the Hudson Bay Company, including food; that of the American Company in and about the mountains of the Independent Trappers; that of the Indians going to hunt buffalo, many being lost by abuse and hardship, and more stolen by the Blackfeet, Crows, Youtas, Snakes, and other tribes. It was not uncommon that a single Indian owned a hundred or more of them.

This valley is capable of producing large quantities of hides, tallow, beef, and wool. It has all the advantages of California for grazing, without its defects: droughts do not occur to injure it for this purpose. The slopes of the mountains or the bottom of the valleys are a green pasture at all seasons. The winters are cold enough to salt meats, which is not the case in California. This valley is pre-eminent for its pastoral advantages.

Its agricultural facilities are not so great: still, some of the bottoms of the rivers are good soil, and the lower slopes of the mountains generally so; in both, irrigation could be easily applied, and the agricultural wants of a pastoral people abundantly supplied.

No country affords better streams for manufacturing purposes. The waters are

very equal, being supplied, in the cold season, by the rains and melting snows of the lower parts, and in the warm season by that of the mountains.

The routes of this country are not deficient, and a point below the Great Dalles may be easily reached, where there is a fine and deep river to the Cascades, where is a portage of about two miles, which might be improved, and from that to the sea is good navigation.

This region may be called perfectly healthy. In it the epidemic fever, which broke out on the lower Columbia, in 1829, and continued its ravages until 1836, and nearly exterminated the native races there, has not been known, except in cases of persons who had been previously in the infected region. These sometimes suffered from it, but none others.

LETTER XII.

June 2d, 1848.

SIR:

I now send you a few remarks on the route to Oregon, and the improvements of the Indians.

I have confined myself to their physical condition, which I consider preliminary to moral or natural development in most cases, and more particularly among a people who are starving for food, and freezing for want of clothes and shelter, at least half the year.

LETTER XIII.

June 2d, 1848.

SIR:

A line of communication across the continent, and the improvement of the condition of the Indians through whose countries it may pass, involves the consideration of several important facts.

1st. The policy of this government, which has had the effect to concentrate the Indians toward the Rocky Mountains, and in the neighborhood of this route.

2d. That the increased number of the Indians is fast destroying the game on which they mainly subsist.

3d. That the stream of white population passing through these countries, and more particularly the introduction of the Robe Trade, is rapidly hastening the decrease of the game.

4th. That, notwithstanding the Indians east of the mountains have a country well fitted for agriculture, yet they have never depended much on it, for their subsistence, and appear unfitted for its steady labors. This renders it wholly improbable that those west of the mountains, with a soil and climate generally unfitted for agriculture, and who have never planted a seed, will ever devote themselves to its pursuit.

5th. In the natural progress of the improvement of man, the pastoral condition is the second stage, and succeeds that of the hunter.

6th. That some of the Indians, in the region under consideration, have already reached this second condition, having introduced and reared horses, and more recently by obtaining cattle, and appear well disposed to commence such pursuits.

7th. That peace cannot be maintained among numerous and various tribes of Indians, unless means of subsistence can be provided to prevent the necessity of one preying on another, and all, on our citizens, who may be located in those regions, or on their way through them.

The following remarks should be confined to the countries I have heretofore partially described, viz., from the summit of the South Pass by the Colorado, Bear, Snake, and Columbia Rivers to the Great Dalles, being the route through which our communications will be made with the settlements in Oregon, and by which the great mass of emigration to that region must pass.

This country is essentially different from any which this government has heretofore controlled, but is of the same character as the great mass of that which is soon to be placed under its protection. It resembles the interior of Asia. None of the roving tribes who infest it claim the ownership of its soil; they visit it only to hunt game, and murder and plunder those they meet, if they are strong or cunning enough to do so. The different bands of Shoshonees are its true inhabitants, except below the Blue Mountains, where the Cayouses and Walla-Wallahs dwell. These Indians plant nothing, and live only by the indigenous productions, on fish, game, and roots. I do not know that they ever claimed the ownership of the soil in a single instance.

The treaty system, which has been pursued, as regards the Indians and their lands, this side of the mountains, appears to me inapplicable to this region. First, Because, in a large portion of the country, there is no resident Indian government with whom to treat. Government has not been introduced among them to a sufficient extent for this purpose. They exist in small detached bodies and single families, and change their locations so widely that they seem to have no particular claim to any portion. Second, There is no distinct property to be treated for, as no considerable body of these Indians, except between the Cascade and Blue Mountains, can be found whose lines of wandering have not continually interlocked with those of similar bands. Third, If there were distinct ideas of ownership in the soil, the case would still be the same, as an immense proportion of it would be entirely valueless, if distributed in distinct properties. It is only valuable as a commonalty, and for grazing purposes, except in locations which are of very limited extent.

I coincide with the opinion, so often expressed by those best acquainted with this region, that posts should be established at suitable points on the route through it; but I would not confine the use of them to the protection and aid of emigrants, but extend it to the improvement of the condition of the Indians, together with fostering a white

pastoral population. For which purpose I would propose the establishment of posts, say one each, at the "Red Butes" of the Platte; the mouth of the "Sandy," on Green River; at "Bear River," near the Soda Springs; in the valley of "Fort Hall;" in the valley of "Bruneau;" in the valley of "Powder River," near the Lone Pine; at the mouth of the "Umatullah," about fifteen miles below Walla-Wallah; and at the "Great Dalles" of the Columbia. These points are about seven camps distant from each other, for packed animals, except that Bear River is five camps from Sandy, and two from Fort Hall; and they are all on the immediate line of the Oregon trail, within that which passes north, if Snake River bend is followed, or that which passes on the south.

These posts should have a military force appointed to each, of from 20 to 100 men. The two nearest the south Pass should be more strongly garrisoned than the intermediate ones between them and those on the Columbia, where the Indians are more effectively organized. A disposable force would also be required, of perhaps 100 men, to support any point which might require it, and supply convoys and expresses, &c. These posts should also have a sufficient number of white laborers for the operations of agriculture, for their subsistence, and to superintend the herding of animals, but the main body of the herdsmen should be selected, in preference, from the Indians. Horses, cattle, sheep, and goats, whichever might suit the particular location, should also be provided for these establishments, taking care to select good breeds.

All these posts would produce wheat and many other articles required for their support, except, perhaps, those of Sandy and the Red Butes, where it would be uncertain.

These positions might probably be kept up with a less force than stated above, but as the game decreases rapidly, and in most of this region is now nearly extinct, the Indians may become more troublesome; besides, it is always best to show them an imposing force in the beginning. It will probably be some time before the Indians will be induced to respect property from any motive but fear; eventually, the fact of possessing it themselves may furnish another motive.

Indians should be employed for all services which they can be induced to perform; particularly such as are required in managing the animals which may be reared, and their services paid in cattle and clothing, with a view to induce them to become owners of herds.

Such portions of the country as may appear fitted for agriculture, should be reserved to the government; and of the lands so reserved, an allotment should be made to every Indian inhabitant of the country, and the remainder, except such as might be reserved for the use of the government posts, opened for sale to whites or Indians who might choose to purchase. The remainder of the country should be thrown open for one vast grazing-field, to be used by all who might own stock.

The posts just established should at first attend to the rearing of stock; but subse-

quently, when a sufficient number of animals have been transferred to private individuals, either Indian or white, it might be relinquished to their enterprise.

At first the expenses of these establishments might be considerable; but in the end this would be fully compensated by the advantages gained. A tax per head might be laid on the animals grazed on the common lands, as a condition of the use of them for that purpose, and also on the allotments of agricultural lands; and from these services, in a few years the revenue would nearly or quite equal the expenditure.

The lands being in common, cattle intended for export from the country might be grazed slowly, at a proper season, down to the Great Dalles; whence the transportation would be a slight charge.

I am fully impressed with the belief that these Indians must become extinct under the operation of existing causes, and that some system should be adopted for their improvement which will supply their physical wants, and develop such elements of wealth as may exist in these remote regions, both for the benefit of their race and our own. I have no doubt that some well-devised system to carry out the leading ideas above expressed, would in time accomplish both; but should it fail, as all other plans have, to improve the Indian race, it would certainly enure to the advantage of our own, by rendering productive in pastoral wealth regions which otherwise will remain a waste.

LETTER XIV.

June 6th, 1848.

SIR:

Your favor of 2d instant was received yesterday. I do not precisely understand whether you seek the Indian name of the Bear River, or that of the Snake River. The latter is called by the Nézperces "Säaptin," and by the Shoshonees "Päah," and the tribal name of the Nézperces was, I believe, Säaptin. Among them the Bear is called Hohost, and lower down on the Columbia it is Khoot. Lewis and Clark's Narrative mentions a chief named "Hohostilpilp," which means red or brown bear, and should be divided thus—Hohost-ilp-ilp; and the Koos Kooshe, on which he was found, is a compound of the word koots, or little, and coose, or horse—*little* horse, which is the name for the dog. The Nézperce whom I brought to Boston in 1833, called my cat by the same name also. Also by the Säaptins all the colors are denoted by double words, as "hi-hi," white, "ilp-ilp," red or brown, "snioux-snioux," black.

With the resident Shoshonees of Bear River of Salt Lake, I had no verbal intercourse. In 1833, when I saw them, they always fled to the inaccessible mountains.

Without having any evidence of the fact, I suppose the name of the river was given by the whites. At one time it was called White River. In the same manner the trappers have named branches of Grand River "Little Snake" and "Little Bear River," and some used the word South instead of Little, while the Shoshonee name of the latter was "Yampah."

The great number of bears which formerly harbored in the deep volcanic chasms of the mountains, near the Soda Springs, might have induced either whites or Indians to confer this name on the river.

I might, if desirable, give you a very few Nézperce and Flathead, or Spokan words, and more that were used on and near the Wallamette; but I suppose there is now much better means of obtaining a vocabulary of the latter.

LETTER XV.

August 14th, 1848.

SIR:

Your favor of 29th ultimo was received on the 1st instant. Unavoidable engagements have prevented answering it until now.

I have no memorandum of the statistics of the Snakes, Bonacks, and Shoshonees, although one was kept at Fort Hall of the Indians who visited that establishment, up to the time it was sold to the Hudson's Bay Company, in 1837; but such estimates are of little value, owing to the inaccuracies arising from the very roving character of the Indians of that region, and the difficulty of identifying them when they return, after long intervals of time.

The Green River Snakes have a country well stored with buffalo, and consequently good food, clothes, and lodges. They appeared to be thriving Indians in 1836, but I do not suppose they were on the increase. Probably they had been stationary in numbers for a long period; and the same observation, I think, may be applied to all the Indians on both sides of the mountains, who have access to the Buffalo regions. I suppose that all such Indians have been prevented from increasing by continual encounters, arising from horse-stealing and other predatory habits incident to hunting-grounds, which are used as a commonalty among several tribes, combined with the natural desire of each to monopolize the whole.

The natural effect produced by a state of warfare would be to compel them to visit the hunting grounds for limited periods, and in large parties, for the purpose of making meat and skins, retiring, when that was accomplished, to residences more secure for themselves and property, thereby allowing the buffalo some respite. It has been noticed that all buffalo countries are the war-grounds of several tribes. Before the inroads of the Whites to these regions, a long-continued peace among the Indians, allowing them to hunt continuously, and in small parties, would have increased their numbers; but if long continued would have extirpated the game, and, in the end, compelled the Indians to choose between the labors of herding domesticated animals and agriculture, to sustain the increased number, or a resort to war to reproduce an equilibrium with the means of sustenance. The latter resort is more in accordance with the Indian mind, in its past and present state.

From such considerations, my own opinion is, that these Indians have been, as

regards numbers, for a long time weighed in a balance, the means of subsistence sometimes preponderating, and increasing their numbers, and this decreasing the game, which would again produce depopulating contests, which would again allow the game to increase.

When the Whites began to visit these regions, the destruction of the game became inevitable, and that of the Indians will surely follow, if the power of the government is not exerted to substitute some means of obtaining food which is available, without a violent or sudden departure from their established habits and natural character.

No success has attended the effort to bring the natives of this continent to the level of our race; but it is incumbent on us to continue it in good faith, and I am fully impressed with the belief that it might be accomplished through the introduction of the means and habits of pastoral pursuits, as an intermediate step to agriculture, and I believe the experiment would not cost, in dollars, as much as that of keeping Indians quiet, who have been crowded into countries nearly destitute of game, while they are still inadequate to the labors of agriculture.

The Bonacks and Shoshonees, I have no doubt, were decreasing when I was in their country, and I do not believe they were ever very numerous: the country is too poor, in all respects, to admit of increase.

I can without any reserve state, that the Indians between the Rocky and Blue Mountains, and from 49° to 53° north latitude, which includes the range of these two tribes, and many more, were never demoralized previous to 1837, by the introduction of alcohol. I was in the trade myself and conversant with the parties who visited that region, and the management of all the posts in it, for the five preceding years. Spirits were never traded with them; rarely, a good hunter or chief was presented with a glass on his arrival. And the whole quantity introduced in a year would not have supplied the value of a week's fertility in a year to the white persons in the country. It was far too expensive, owing to long transportation on packed animals, which was the only means of conveyance, to be brought in considerable quantities.

The introduction of alcohol among Indians may have influenced their condition elsewhere, and would probably do so in the countries referred to, but when I left those regions, their products were so inconsiderable in value, as to interpose a complete protection from its introduction or use.

I am, very respectfully,

Your Obedient Servant,

NATHANIEL J. WYETH.

HENRY R. SCHOOLCRAFT, ESQ.

4. THE COMANCHES AND OTHER TRIBES OF TEXAS; AND THE POLICY TO BE PURSUED RESPECTING THEM.

BY EX-PRESIDENT DAVID G. BURNET.

THE eminent position in Texan history, of the writer of the following paper—his early migration into the area of Texas; and the opportunities of observation he has had, for a long series of years, upon the manners and customs, traits, character, and numbers of the aboriginal population of that state, give a value to it, which will not fail to be recognised. Mr. Burnet was one of the earliest Americans who migrated into that country, during the era of the Austin movement.

Austin, Texas,
September 29th, 1847.

SIR:

Major Neighbors, the special Indian Agent for Texas, some time ago presented me a pamphlet containing many queries in relation to Indians, their history, habits, &c.;[1] and requested I would furnish something concerning the Comanches, among whom he knew I had been.

Always willing to contribute any thing in my power to the general mass of intelligence, on a subject of such intrinsic interest, I have prepared a paper of some length, —it may be of some little value,—relating to the Indians of Texas, but principally to the Comanches, our most considerable tribe. In the continued absence of Major Neighbors, I take the liberty to transmit it to you. If it will add any thing worth being contributed to the amount of information sought to be collected, I shall be fully compensated for the trouble of preparing it.

The subject touched on in the two last paragraphs, though somewhat extraneous, is one of present interest to the General Government, and to this new State.

Very respectfully,
Your obedient Servant,
DAVID G. BURNET.

HENRY R. SCHOOLCRAFT, ESQ.

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[1] Vide "Inquiries," issued by the War Department in 1847. See Appendix.

August 20th, 1847.

SIR:

During the years 1818–19, I spent a considerable time with, or in the vicinity of, the Comanche Indians of Texas. My purpose was the renovation of an impaired constitution, seriously threatened with pulmonary consumption, in which I succeeded beyond my utmost expectations.

This residence in the Indian country, enabled me to collect some facts in relation to the Comanches, and some minor tribes of Texas, which may possibly be worthy of being communicated to the Department of Indian Affairs, in reply to the very voluminous inquiries concerning the aborigines of the United States, lately promulgated by the Chief of the Department, a copy of which you have furnished me. My information is entirely too limited and imperfect, for me to attempt a specific answer to the several queries propounded. The want of an adequate interpreter would alone have precluded me from acquiring the minute statistical and other information necessary to that end, had my mind been specially directed to such an object. I shall therefore condense the remarks I have to make, and which, in the absence of all memoranda, I must draw from a recollection of near thirty years.

The Comanches are the most numerous tribe of Indians in Texas. They are divided into three principal bands; to wit, the Comanche, the Yamparack, and the Tenawa. The former, with whom *we* have most intercourse, from their geographical position, occupy the region between the Rivers Colorado of Texas and the Red River of Louisiana; ranging from the sources of the Colorado, including its western affluents, down to the Llano Bayou; and from the vicinity of the Pawnees, on the Red River, to the American settlements on that stream. They are frequently at war with the Pawnees, and sometimes make a hostile incursion upon the Osages. The Yamparacks range the country north and west of the Comanches; and the Tenawas again interior from the latter. They are essentially one people: speak the same language, and have the same peculiar habits, and the same tribal interests.

In 1819 the three bands consisted of 10,000 to 12,000 souls, and could muster from 2000 to 2500 warriors. They have been generally estimated at much higher numbers, but I am persuaded the above would comprise their entire population and their utmost military force. Since the period above named, I presume they have rather diminished than increased in numbers, as they are generally engaged in depredating upon the proximate Mexican settlements, by which they often suffer loss of life; are also occasionally at war with other tribes; and have within a few years sustained some abatement of numbers in their forays upon our settlements.

The Comanches have no definite idea of their own origin. Their loose tradition is, that their ancestors came from the *North;* but they have no precise conception of the time when, or from what particular region. They are nomadic in their manner of life;

their cattle consisting of horses and mules, which they rob, for the most part, from the imbecile Mexicans, who hold them in great dread. They have no knowledge of agriculture, but depend entirely on game for subsistence, and chiefly on the buffalo, which descend in large herds to their region on the approach of winter. During the summer months, when the buffalo return to their northern pastures, these Indians are often exposed to suffering, and find it difficult to procure adequate sustenance; but they have a rare capacity for enduring hunger, and manifest great patience under its infliction. After long abstinence they eat voraciously, and without apparent inconvenience.

I do not believe the Comanches,—by which term I intend the entire tribe,—have any traditions of the slightest verisimilitude, running farther into bygone time than the third generation. Their means of knowledge of the past are altogether oral; unaided by monuments of any description. I could never discover that they had any songs, legends, or other mementoes, to perpetuate the fêtes of arms, or other illustrious deeds of their progenitors; and I question if the names of any of their chiefs of the fourth generation ascending are retained among them. They perish with but little more note of remembrance than does a favorite dog among the enlightened of the people. In 1819 their principal chief, who was generally recognised as the head of the three bands, was called *Parrow-a-kifty*; by interpretation, Little Bear. He was a Tenawa, and was a brave, enterprising, and intelligent savage; superior to his tribe in general. He was celebrated for his taciturnity and sedateness; it was said of him, that he never laughed, except in battle. His habitual taciturnity was not of that affected kind which is sometimes adopted among the more enlightened, as a convenient substitute for, and type of, wisdom.

The authority of their chiefs is rather nominal than positive; more advisory than compulsive; and relies more upon personal influence than investment of office. They have a number, altogether indefinite, of minor chiefs or captains, who lead their small predatory bands, and are selected for their known or pretended prowess in war. Any one who finds and avails himself of an opportunity for distinction in robbing horses or scalps, may aspire to the honors of chieftaincy, and is gradually inducted by a tacit popular consent, no such thing as a formal election being known among them. They usually roam in small subdivisions, varying according to caprice, or the scarcity or abundance of game, from twenty to one hundred families, more or less; and to each of these parties there will be one or more captains or head men. If any internal social difficulty occurs, it is adjusted, if adjusted at all, by a council of the chiefs present, aided by the seniors of the lodges, whose arbitrement is usually, though not always, conclusive between the parties at variance: but there are not many private wrongs perpetrated among them, and family or personal feuds seldom arise—they live together in a degree of social harmony which contrasts strikingly with the domestic incidents of some pseudo-civilized communities, that vaunt of their enlightenment.

They have no idea of jurisprudence as a practical science, and no organized and authoritative system of national polity. One captain will lead his willing followers to robbery and carnage, while another, and perhaps the big chief of all, will eschew the foray, and profess friendship for the victims of the assault. Hence *treaties* made with these untutored savages are a mere nullity, unless enforced by a sense of *fear* pervading the whole tribe: and it is somewhat difficult to impress this sentiment upon them; for they have a cherished conceit, the joint product of ignorance and vanity, that they are the most powerful of nations.

They recognise no distinct rights of *meum* and *teum*, except to personal property; holding the territory they occupy, and the game that depastures upon it, as common to all the tribe: the latter is appropriated only by capture. They are usually very liberal in the distribution of their provisions, especially in a time of scarcity. Their horses and mules are kept with sufficient caution, in separate cavalcades or hordes. Industrious and enterprising individuals will sometimes own from one to three hundred head of mules and horses, the spoils of war. These constitute their principal articles of traffic, which they exchange for the goods their convenience or fancy may require. They sell some buffalo robes, which are dressed, and sometimes painted, by the women with considerable taste. Prisoners of war belong to the captors, and may be sold or released at their will. While among them, I purchased four Mexican prisoners, for each of whom I paid, on an average, about the value of 200 dollars, in various articles, estimated at *their* market value. One of them very soon stole a horse and ran away; two were worthless idlers; and one old man rendered some remuneration by personal services.

These three cognate tribes cannot be said to have any common tribal government. The Tenawa and Yamparacks trade with the Mexicans of Santa Fé, while the lower party war upon the Mexicans of Chihuahua, and all the lower provinces, including Tamaulipas. Still, hostilities by the United States with the one, would involve a conflict with all; for the Comanches, the lower party, if pressed, would retire to, and coalesce with, their kindred, who would adopt the quarrel without an inquiry into its justice or expediency. But, ordinarily, there is no political intercommunion between them, although they sometimes cohabit and pursue the buffalo in the same range. The two upper parties have comparatively few mules or horses, being less convenient to those portions of Mexico where these animals most abound; the regions of the mid and lower Rio Grande. They have no established "*game laws*," but they regard the ingress of stranger hunters with a jealousy that is sometimes fatal to the intruders. This seldom occurs, unless the destruction can be consumated with impunity. As before remarked, their trade consists principally in the exchange of horses and mules, for the usual articles of Indian commerce. They are sufficiently astute in dealing, although quite ignorant of the real value of many articles they purchase, and are liable to be egregiously imposed upon. A prompt *delivery* on both parts, is the best mode to

secure payment. When goods are delivered to them on credit, they are either gambled off, or distributed by donations to friends, in a few days, and then the improvident debtor "loves his horses," and pays them with reluctance, if at all. An obstinate refusal to pay, is difficult to overcome—though I have known the chiefs in council to compel payment—but the combined influence of several of their most powerful chiefs was necessary to effect it.

The Comanches take no furs, and but few deer-skins, the most of which they consume at home. There are very few beavers or otters in their country, and they know nothing of the art of trapping. The American trappers have nearly extirpated these valuable animals from the waters of Texas. They have no idea of the value of money as a medium of exchange. I have often seen dollars and their several integrants, suspended in a continuous line, terminating in picayunes, to the hair of a Comanche dandy, elongated by horse-hair or a cow's tail.

The Comanches compute numbers by the fingers—the digits, by single fingers extended—decimals by both hands spread out—and the duplication of decimals, by slapping both hands together to the number required—I do not know the names of their digits, except the unit, *semus;* nor to what extent they carry these generic denominations; but doubt if they have any term for a higher number than twenty—after that, they resort to the names of the several digits for the multiplication of the decimal number. They keep no accounts in hieroglyphics, or devices of any kind, but rely entirely upon memory; their commercial transactions being few and simple.

They have made but small advances in the science of medicine, and have no determinate knowledge of the pathology of diseases. The country they inhabit is remarkably salubrious, and I noticed among them several instances of apparently great longevity, accompanied with a notable retention of the mental and physical faculties. There are no marshes, swamps, or stagnant water-pools, to send forth miasmatic exhalations, engendering "the pestilence that walketh in darkness." I believe they have a very potent and efficacious, if not a sovereign, vegetable remedy for the bite of venomous reptiles, unless a principal artery is punctured. They are expert in curing gun-shot wounds, and in the treatment of fractured limbs, which they bandage with neatness and good effect. They have no knowledge of the art of amputation, and if gangrene supervenes in any case it is remediless. They believe in divers amulets and other mystic influences; and have a custom of "singing for the sick," when a crowd assembles at the lodge of the sick person and makes all sorts of hideous noises, vocal and instrumental, the object of which is to *scare away* the disease;—it is certainly better calculated to affright than to soothe. I did not inquire, with any minuteness, into their materia medica, believing that Comanche specifics were more likely to be efficacious among themselves than with others: their diet and all their habits are simple, and they are strangers to strong drink, or "*fire-water*," as they significantly call alcoholic liquors. They have no regular physicians, and have

not much use for any, for there are few diseases prevalent among them. Fevers sometimes occur, but are not understood either in their pathology or manner of cure: they are generally intermittent, and of a very mild type, owing partly to the arid purity of their atmosphere. They have no professed practitioners in obstetrics. A woman will accomplish her parturition without aid, and sometimes on a journey, without losing an entire day's march. The small-pox was introduced among them the second year previous to my visit, and swept off a great number. It prevailed but a short time or the nation would have become extinct, for I believe very few who imbibed the virus survived its ravages. Their mode of treatment was calculated to increase the mortality. The patients were strictly confined to their lodges, excluded from the air, and almost suffocated with heat. In many instances while under the maddening influence of the disease, exasperated by a severe paroxysm of symptomatic fever, they would rush to the water and plunge beneath it. The remedy was invariably fatal.

The Comanche costume is simple, though often variegated: it consists generally of a buffalo robe, worn loosely around the person, and covering the whole to the ancles. This is sometimes painted, or ornamented with beads on the skin side, or both. They prefer a large mantle of scarlet or blue cloth, or one half of each color, except in very cold weather, when the robe, the hair turned in, is more comfortable. The breech-cloth is usually of blue stroud, and descends to the knees. The leggings, made long, of dressed deer-skin, or blue or scarlet cloth, garnished with a profusion of beads and other gewgaws. The head-dress is as various as their fancies can suggest, and their means supply. *Parrow-a-kifty's* parade head-dress was a cap made of the scalp of a buffalo bull, with the horns attached in proper position. He ordinarily wore few ornaments. The young men, the exquisites of the tribe,—and no people, savage or civilized, are more addicted to the fanciful in dress,—bedaub their faces with paints of divers kinds and colors—red, black, and white predominant—these they obtain, for the most part, from the different fossils of their country, without chemical elaboration. Vermilion is much admired, but is generally too costly for habitual use. They sometimes load their heads with feathers, arranged in lofty plumes, or dangling in the air in pensile confusion, or wove into an immense hood. The hair is often besmeared with a dusky-reddish clay; and horse-hair, cow-tails, or any other analogous material, is attached to the conglomerate mass, until the huge compound cue will descend to the heels of the wearer. They wear arm-bands, from one to ten or more on each arm, made of brass wire, about the size of a goose-quill; nose-pieces, of shell, or bone, or silver, attached to the division-cartilage; and ear-pendants, of strung-beads or any thing they fancy and can procure. They know nothing of the origin of these customs of the costume, and understand as little of any sensible reason for them, as the more civilized dandy does, of the *rationale* of his changeful fancies of the toilet, which are sometimes equally as ridiculous and diverse from the simplicity and the

symmetry of nature. Their actual war-dress approaches to absolute nudity. When about to attack an enemy, which they always do on horseback, they disrobe themselves of every thing but the breech-cloth and moccasins. Their saddles are light, with high pommels and cantlins; and they never encumber their horses with useless trappings.

The women are held in small estimation; they are "hewers of wood and drawers of water" to their indolent and supercilious lords. But this is common to all people, on whom the oracles of truth have never shed their humanizing influence. The women, married and single, pay much less attention to personal adornment than the men, and appear, in the degradation of their social condition, to have retained but little self-respect. They are disgustingly filthy in their persons, and seemingly as debased in their moral as in their physical constitution. They are decidedly more ferocious and cruel to prisoners than the men, among whom I have sometimes witnessed a gleaming of a kind and benevolent nature. It is an ancient custom to surrender a prisoner to the women, for torture, for the first three days of his arrival among them. These fiends stake out the unhappy victim by day, that is, fasten him on his back to the ground, with his limbs distended by cords and stakes. At evening, he is released and taken to the dance, where he is placed in the centre of a living circle, formed by the dense mass of his tormentors, and made to dance and sing, while the furies of the inner line beat him with sticks and thongs of raw-hide, with great diligence and glee, until their own exertions induce fatigue; when he is remanded to his ground-prison, to abide a series of small vexations during the coming day, and a repetition of the fell orgies the ensuing night. At the expiration of the three days, he is released from their custody, exempt from further annoyance, and taken to the lodge of his captor, to enter upon his servitude. This course is not universal. Adult prisoners are sometimes deliberately put to death with protracted tortures, when the party taking them have suffered much loss of life in the foray. At such times, these savages will eat a portion of the flesh of their victims; and so far are liable to the charge of being cannibals. But they eat to gratify a spirit of revenge, and not to satiate a morbid and loathsome appetite. Cannibalism, disgusting in all its phases, is with them a purely metaphysical passion. It is perhaps more abhorrent, to a correct moral sense, though less loathsome than that which results from mere brutal appetite. When boys or girls are captured, they are not subject to any systematic punishment, but are immediately domiciliated in the family of the captor. If docile and tractable, they are seldom treated with excessive cruelty. They are employed in menial services, and, occasionally, in process of time, are emancipated and marry into the tribe, when they become, *de facto*, Comanches. There were a number of Mexican juvenile prisoners among them. Those I saw were reluctant to being redeemed, and a much higher value was set on them than on adults.

Polygamy, to an indefinite extent, is permitted. One chief, Carno-san-tua, the son

of America, a name I presume of Mexican bestowment, had ten wives, all of whom seemed to live together in uninterrupted harmony, although one of them was evidently the chief favorite. Wives are divorced unceremoniously by the husbands, and sometimes marry again. Infidelity, on the part of the wife, is punished by cutting off the nose; the excision is made from the lower extremity of the cartilage, diagonally to the lip. I saw several instances of this revolting retribution. The women do all the menial work. They often accompany their husbands in hunting. He kills the game, they butcher and transport the meat, dress the skins, &c. One or more women will sometimes accompany a war-party, when they act as hostlers and serviteurs generally. When in the enemy's country, and near the scene of intended assault, the party selects some sequestered spot, in a dense thicket or chapparal, if to be had, where they encamp, deposit their feeble horses and surplus baggage, with a few of the aged or inefficient warriors, and the women, as a camp-guard, while they sally out, usually by moonlight, in quest of prey. They war for spoils, and their favorite spoils are horses and mules. They often drive off several hundreds of these from a single Mexican ranche, on one foray. The Comanches are not deficient in natural courage, and no people excel them in the art of horsemanship, and few, if any, in the use of the bow and the javelin, both of which they handle with great dexterity, on horseback. As foot-soldiers, they are comparatively of little account; but they are seldom caught on foot by an enemy, and never, except by surprise. They use light shot-guns, but have an aversion to the weight of the rifle. Experience has taught them to dread this formidable weapon, in the hands of our brave frontiers-men; and to this sentiment may be attributed much of their forbearance from hostilities. They are generally men of good stature, with very few instances of diminutive size or personal deformity. They use a shield made of raw buffalo-hide, contracted and hardened by an ingenious application to fire. It is oval or circular, about two feet in diameter, and is worn on the left arm. It will effectually arrest an arrow, but is not proof against a rifle-ball in full force.

The geographical knowledge of the Comanches is confined within the small limits of their own actual observation. All beyond is, to their benighted minds, obscure and doubtful, and an Indian's doubt is positive, unqualified disbelief. They are excessively incredulous of any facts, in relation to other countries, that conflict with their own experience. They have no settled, intelligible notion of the form or constitution of our planet, and none of the great planetary system. They know and can discriminate the north star, and are guided by it in their nocturnal journeys. They call it karmeadtasheno; literally, not-moving star. When or how this knowledge was acquired, I did not learn, and presume it is quite unknown to themselves. They recognize the sun as the great fountain of heat, but of its nature, or the manner of its dispensation, they know nothing and care nothing. They refer to time long past, by colds and heats; that is, by winters and summers; and although they pay much attention to

the phases of the moon, the revolutions of that planet are too frequent, and would soon involve too high numbers to constitute a mean of computing the chronology of events, that have transpired more than a year. For short periods, past or future, they count by moons, from full to full. The time of day they note by the apparent position of the sun in the heavens.

The Comanche notions of religion are as crude, imperfect, and limited, as of geography or astronomy. They believe in, or have some indefinite traditional idea of, the Great Spirit; but I never discovered any distinct mode or semblance of worship among them. I frequently observed, early in the morning, a shield, such as they use in war, elevated at the point of a javelin, (the hilt in the ground,) and invariably facing the east. Whether done in reverence to the great rising luminary, and of Ghebir origin, I did not ascertain. They believe in witchcraft, and sometimes attribute their ailments to the magical influence of some subtle and malignant enemy of their own species. They held the *Kitchies*, a small and distinct tribe then residing on the waters of the River Trinity, in peculiar detestation, on account of their supposed powers of sorcery. They imagine that good men (and adroitness and daring in taking scalps or stealing horses are capital evidences of goodness) are translated at death to elysian hunting-grounds, where buffalo are always abundant and fat. The reverse of this maximum of Comanche felicity is assigned to the wicked. In order to facilitate the posthumous enjoyments of a deceased warrior, they sacrifice some of his best horses, and bury in his grave his favorite implements of the chase for his future use. They have no determinate idea of the locality of these imaginary hunting-grounds. They mourn for the dead systematically and periodically with great noise and vehemence; at which times the female relatives of the deceased scarify their arms and legs with sharp flints until the blood trickles from a thousand pores. The duration of these lamentations depends on the quality and estimation of the deceased; varying from three to five or seven days: after which the curtain of oblivion seems to be drawn around the grave. Whether this bloody rite of scarification has descended by tradition from the worshippers of *Baal*, is a question in elucidation of which they have no relic, oral or material, or other adumbration of evidence, beyond the obvious similitude of the act itself with a custom of the heathen of the antique Canaan.

I perceived no order of priesthood, or anything analogous to it, among them; if they recognise any ecclesiastical authority whatever, it resides in their chiefs; but I think their religious sentiments are entirely too loose, vague, and inoperative, to have produced any such institution. The elevation of the shield is the only act I ever noticed among them, that afforded the slightest indication of religious concernment; and I doubt if they have any opinions relative to future rewards and punishments that exercise any moral influence upon them. They have nothing like a system of mythology, and neither do they entertain any religious myths of a traditionary or settled character. That impressions of this kind may be easily made upon them, is

probable; for they are addicted to superstition, and apt to believe any absurdity, natural or preternatural, that does not conflict with their personal or natural vanity. But their minds are too little intent upon the subject of a future state, ever to have formed a connected system of opinions in relation to it. If the doctrine of metempsychosis has ever been presented to them, it has not received a national or general credence: indeed, I doubt if they have any common plan of religious belief, or of a supernatural agency operating on the affairs of this life, beyond the mystic vagaries of witchcraft; and of these, they do not distinctly believe in anything beyond the potentiality of human means. It may be assumed of them, as to all the practical results of religious sentiment, that "the fool hath said in his heart, there is no God."

The country inhabited by the Comanches, at least that portion of it watered by the Colorado and its tributaries, is of a broken and varied surface—hilly, not mountainous. The valleys are generally small; some of them timbered, principally with the musquit; and some prairie: all of them covered with the best musquit grass, and affording the richest pasture. The soil, still in its virgin state, has the appearance of great fertility, but is, in general, too arid for successful culture, without artificial irrigation. The climate is exceedingly dry, and the protracted heats of the summer exhaust all humidity from the atmosphere, and from the soil. During the hot months the dews are light, and not very frequent. The margins of the creeks, and of the Colorado, are belted with timber of the several varieties found in similar latitudes: the live-oak and pecan are abundant; the first found in beautiful groves on the hills and level uplands. Timber suitable for building is scarce, but stone abounds. No country is better adapted to raising stock of all kinds, and especially of horses; and Estremadura cannot excel it for sheep-walks. The principal animals are the migratory buffalo, bear, deer, some antelopes, wolves of several varieties, panthers, and mustangs, or wild horses, which last are obviously of a superior quality to those found on the level or coast prairies; rabbits, of several kinds, pole-cats, and prairie-dogs are abundant: these last burrow in the ground, and live in little subterranean villages; they partake more of the qualities of the squirrel than of the canine species. Of the feathered tribe, the buzzard predominates; these serve to guide the wanderer to an Indian camp, over which they generally hover, in anticipation of a plentiful repast at the evacuation. Wild turkeys are seen in large flocks; the small birds are scarce; owls, of several kinds, are plentiful, and render the night vocal with hoots and hideous screams; the cardinal (red-bird) inhabits the thickets, but it is seldom the ear is saluted with the carols of nature's songsters in those sequestered regions.

The country adjacent to the San Saba, a principal western tributary of the Colorado, exhibits frequent indications of minerals, particularly of iron, lead, and silver; I was shown a specimen of copper ore, found near the Brazos, high up, which was, apparently, almost pure. My informer, a Mr. Peyton Johnson, a very worthy man whom I found in the Comanche country, and who had visited the copper locality,

assured me there were thousands of wagon-loads of ore, similar to the specimen, lying on the surface of the ground. There is, beyond doubt, more iron-ore in the inland regions of Texas than timber to smelt it; and enough to close hoop the globe with railroads. Stone-coal will assuredly be found in abundance, for the distribution of nature's bounties is ordinarily too equable and provident to permit the apprehension that a country abounding in the most useful and some of the precious metals should be destitute of the means to render them available.

I never discovered or heard of any remains of ancient edifices or any tumuli, indicating the previous existence of a more enlightened race of men, in the Comanche country. Flints neatly formed into arrow-heads, are frequently found throughout Texas; some under ground, and some above—they are wrought into good shape and various sizes. The manner of their cleavage I do not know. The Indians now use iron points to their arrows; but the use of the bow and arrow is gradually diminishing, and giving way to that of fire-arms.

The Lipans are a tribe of considerable importance, and may be ranked next to the Comanches among the Indians of Texas. They have affinity with the Seraticks and the Muscalaroes; and if estimated as identical with them, are very superior to the Comanches in numbers. They have never made war upon our frontier; and their present equivocal condition is to be regretted. They are more enterprising and warlike than the Comanches, who regard them with a respect, in which fear is a chief ingredient. Their habits are very similar to the Comanches in some respects; but they have made somewhat more progress towards civilization. Many of them speak the Spanish language, having formerly had much intercourse with the Mexicans. They can now raise about 200 warriors of their own band. The Seraticks live on the Rio Grande, above the Passo del Norte. Very little is known among us, in relation to them. The Muscalaroes inhabit the river Puerco, a considerable eastern affluent of the Rio Grande:—from the best information I have, they number 1000 to 1500 warriors—are of dark complexion—peaceable in their habits—cultivate the ground and raise stock—have many horses and mules—also sheep, goats, and black cattle.

The Tonkawas are a separate tribe, having no traceable affinity to any other band of Indians in the country. They are erratic—live on game, and are quite indolent—and often in extremity of suffering. They have generally been friendly to the whites, though often suspected of having stolen horses from the frontier. A few of these accompanied our small army in the campaign againt the Cherokees in 1839, and rendered good service. There are about 150 warriors of this tribe—they have usually warred within the limits of our settlements.

The Whacoes—Tawacanies—Tow-e-ash—Aynics—San Pedro's—Nabaduchoes—Nacado-cheets, and Hitchies, are small tribes or fragments of tribes, and, separately considered, are quite insignificant. They have been long resident in Texas, and properly belong to it—but they are, originally, the Hitchies excepted, of the Caddo

stock, being offsets from that family. The Whacoes are the most considerable of these bands, amounting probably to 150 warriors, it being understood among Indians that every adult male is a warrior. They are a stealthy, thieving, faithless race, and have done much mischief, first and last, on our frontier. They live in a village on the Upper Brazos, and raise corn, beans, pumpkins, &c., and usually spend the winter months in hunting. The other small parties, amounting to about fifty families each, live in villages, on the waters of the Trinity and Neches, and cultivate the ground to a small extent.

The Hitchies, once a distinct and isolated tribe, have so intermarried with their neighbor bands, that they have lost their identity, and may be considered as merged into the common stock. The Caddoes formerly resided on the Red River of Louisiana, above Natchitoches and below the Great Raft, and were included in the jurisdiction of the Indian Agency stationed in 1819 at Natchitoches. They removed to Texas a few years ago, and now claim to be Texas Indians.

The Caddoes, Cherokees, Shawnees, Delawares, Kickapoos, and some others, parts of tribes, who have been allured into Texas by the amenity of its climate, the abundance of its game, and its comparatively waste condition, are altogether intruders here; and had no right of habitation, until the late government of Texas, with great folly and indiscretion, entered into a treaty with several of them in 1844. By this unwise act, which would have proven vastly more mischievous if the country had remained in separate independence than it now can do, those bands acquired a sanction to their intrusion and a right of settlement, irrespective of numbers; and their numbers would in all probability have been alarmingly increased by immigration from the northern tribes of the United States. Annexation has arrested this evil, and saved Texas from a dangerous influx of the most dissatisfied, loose, and savage of the several tribes from which the first intruders proceeded. And still it is believed they are constantly accumulating; and they are now thrown, by a silly and improvident policy of the government of the late Republic, upon the *State* of Texas and her territory. That they are tenants without title, and hold only at the will of the government, does not divest them of a recognised right of residence, to which *they* naturally attach a right of soil. Their peaceable removal, which the tranquillity of the State will soon require, is practicable only by the Federal Government.

Although the subject is not comprised in the queries propounded by the department, I will suggest that the future peace and happiness of the large inland frontier of Texas requires an early intervention of the General Government, to adjust our complex Indian relations. It is quite impossible for the State, acting within her limited sovereignty, to control and peaceably dispose of the various tribes resident within her territorial limits. The entire subjugation of the Comanches in particular, and probably of other tribes, or their early removal, will be inevitable. The spread of our populatior will, in a very few years, so crowd upon the Comanches' ancient hunting-

grounds, as to compel them either to recede westward or to resist by arms a progression which is perfectly irresistible to their feeble powers. The result of such an issue must be, their entire and absolute extermination; which, by the way, will not be effected without much disaster and bloodshed on our part. The Federal government alone is competent to prevent a catastrophe, which, however oppressive to the ancient occupants, is necessarily consequent to the progress of civilization. The State has not the means to extinguish the Indian titles to the spacious territory over which they roam in pursuit of the only means of subsistence they know, and which they claim by the emphatic right of occupancy for "time immemorial" *to them*. She cannot provide them another and more secure, because remote, country for their future habitation. Such country can be found only in the region of the Rocky Mountains, beyond the local jurisdiction of the States, and is disposable only by the Federal government.

To effect this humane policy,—the only practical substitute for the actual extermination of the Indians,—it is indispensable that the Federal government should become the proprietor of the vacant domain of Texas which comprehends the territory over which these erratic people wander in quest of game. To reclaim the Comanches from the chase, and adapt and reconcile them to the less attractive labors of agriculture, if it be not utterly impracticable, would require many years of experimental tuition, to the very initiative of which they are habitually averse, and which they never would consent to receive from the insulated and defective authority of the *State*. The general government only can manage this delicate subject, of so deep, abiding, and growing interest, happily for all parties, and without great blood-guiltiness to *some* of them.

Your Obedient Servant,

DANIEL G. BURNET.

HENRY R. SCHOOLCRAFT, ESQ.

5. INDIAN TRIBES OF NEW MEXICO.

BY GOVERNOR CHARLES BENT.

GOVERNOR CHARLES BENT, the author of the annexed memoir, who received his authority from General Kearny, fell before the perfidy of the assassins of Taos. New Mexico will long lament the loss of his experience and knowledge of Indian affairs. An extensive acquaintance with the tribes south of the Arkansas and Red Rivers, reaching to the Rio Grande and the regions west of it, had qualified him to make a just estimate of the character and population of the aboriginal tribes who rove over those vast and undefined plains, and mountain fastnesses.

In his estimation of the tribes, the boundaries of New Mexico as known to the Spanish government were exclusively referred to. The subsequent changes made by an Act of Congress, has brought within its extreme western and southern limits, as now established, the elements of a new aboriginal population. Of the region lying in the Valley of the Colorado and north of the Gila, we are too little informed to speak with any degree of precision. The early Spanish adventurers do not profess to have explored it beyond Cibola. Coronada failed in this object of his celebrated expedition. How far the apparently semi-civilized race, to whom the Spanish writers applied the term of "Yumanos," extended north and west into that area, we cannot decide. It may be expected that the Boundary Commissioner engaged in running the lines on that border, will obtain and communicate valuable information respecting the native population and character and resources of that frontier. The establishment of the territory of Utah, and the settlement of the boundary between Texas and New Mexico, affect likewise the estimates of Governor Bent. Respect has been had to these changes in the new estimates of population hereafter submitted.

It is proper to say that this memoir, although dated some months before I commenced my statistical inquiries, was placed in my hands by the Head of the Bureau, as the most authentic document in his possession; a character which, with these changes of boundary, it still preserves.

Santa Fé, New Mexico,
November 10th, 1846.

SIR:

Having been appointed, by Brigadier General Kearny, Governor of the Territory of New Mexico, and, by virtue of that appointment, *ex-officio* Superintendent

of Indian Affairs for said territory, it becomes my duty to lay before you the following information in regard to the different tribes of Indians inhabiting and frequenting this territory.

First I will mention the Apaches, or Jicorillas, a band of about 100 lodges, or 500 souls. The Jicorillas have no permanent residence, but roam through the northern settlements of New Mexico. They are an indolent and cowardly people, living principally by theft committed on the Mexicans, there being but little game in the country through which they range, and their fear of other Indians not permitting them to venture on the plains for buffalo. Their only attempt at manufacture is a species of potter's ware, capable of tolerable resistance to fire, and much used by them and the Mexicans for culinary purposes. This they barter with the Mexicans for the necessaries of life, but in such small quantities as scarcely to deserve the name of traffic. The predatory habits of these Indians render them a great annoyance to the New Mexicans.

Second. The Apaches proper, who range through the southern portion of this territory, through the country of the Rio del Norte and its tributaries, and westward about the head-waters of the River Gila, are a warlike people, and number about 900 lodges, or from 5000 to 6000 souls; they know nothing of agriculture or manufactures of any description, but live almost entirely by plundering the Mexican settlements. For many years past they have been in the habit of committing constant depredations upon the lives and property of the inhabitants of this and the adjoining provinces, from which they have carried off an incredible amount of stock of all kinds. The only article of food that grows in their general range is the maguey plant, and that spontaneously, and in very small quantities. Several bands of the Apaches have, for some years past, received a bounty of so much per head, per diem, from the Government of the State of Chihuahua, with the object of inducing the Indians to cease their depredations; but without having the desired effect.

Third. The Nabajos are an industrious, intelligent, and warlike tribe of Indians, who cultivate the soil, and raise sufficient grain and fruits of various kinds for their own consumption. They are the owners of large flocks and herds of cattle, sheep, horses, mules and asses. It is estimated that the tribe possesses 30,000 head of horned cattle, 500,000 head of sheep, and 10,000 head of horses, mules, and asses; it is not a rare instance for one individual to possess 5,000 to 10,000 sheep, and 400 to 500 head of other stock. Their horses and sheep are said to be greatly superior to those reared by the New Mexicans. A large portion of their stock has been acquired by marauding expeditions against the settlements of this territory. They manufacture excellent coarse blankets, and coarse woollen goods for wearing apparel. They have no permanent villages or places of residence, but roam over the country between the River San Juan on the north, and the waters of the Gila on the south. The country between these two rivers is about 150 miles wide, consisting of high

table mountains, difficult of access, and affording them, as yet, effectual protection against their enemies. Water is scarce, and difficult to be found by those not acquainted with the country: affording another natural safeguard against invasion.

Their numbers are variously estimated at from 1000 to 2000 families, or from 7000 to 14,000 souls.

The Nabajos, so far as I am informed, are the only Indians on the continent, having intercourse with white men, that are increasing in numbers. They have in their possession many prisoners, men, women, and children, taken from the settlements of this territory, whom they hold and treat as slaves.

Fourth. The Moques are neighbors of the Nabajos, and live in permanent villages, cultivate grain and fruits, and raise all the varieties of stock. They were formerly a very numerous people, the possessors of large flocks and herds; but have been reduced in numbers and possessions by their more warlike neighbors and enemies, the Nabajos. The Moques are an intelligent and industrious people; their manufactures are the same as those of the Nabajos. They number about 350 families, or about 2450 souls.

Fifth. The Yutas inhabit the country north of the Nabajos, and west of the northern settlements of this territory. They number 800 lodges and about 4000 to 5000 souls. Their range extends from the Nabajo country, in about latitude 35° to 40° north. Their range of country is very mountainous and broken, abounding in deer, elk, bear, and other wild game, which serve them for food and raiment. They are a hardy, warlike people, subsisting by the chase. Several bands of them have been carrying on a predatory war with the New Mexicans for the last two years, and have killed and taken prisoners many of the people, and driven off large amounts of stock. Since General Kearny's arrival, these Indians have sued for peace, and measures are now taking to effect a permanent treaty.

Sixth. The Cheyennes and Arapahoes range through the country of the Arkansas and its tributaries, to the north of this territory. They live almost entirely on the buffalo, and carry on a considerable trade both with the Americans and Mexicans in buffalo robes; for which they obtain all the necessaries not derived from the buffalo. They are a roving people, and have, for many years, been on friendly terms with the New Mexicans. The Arrapahoes number about 400 lodges, or 2000 souls. The Cheyennes number 300 lodges, or 1500 souls.

Seventh. The Comanches range east of the mountains of New Mexico; a numerous and warlike people, subsisting entirely by the chase. Their different bands number in all about 2500 lodges, or 12,000 souls. They have been at peace for many years with the New Mexicans, but have carried on an incessant and destructive war with the states of Chihuahua, Durango, and Coahuila, from which they have carried off, and still hold as slaves, a large number of women and children, and immense herds of horses, mules, and asses.

Eighth. The Kayuguas range through a part of the same country. They are similar

in habits and customs, and are considered a more brave people than the Comanches. They number about 400 lodges, or 2000 souls.

Below I give a tabular statement of the population of the tribes of Indians ranging the country within the territory of New Mexico and its borders, made up from the most reliable information that I have been able to obtain during a residence of many years in New Mexico and its vicinity.

Apaches or Jicorillas	100	lodges	500 souls.
Apaches proper	900	"	5,500 "
Yutas, Grando Unita River	600	"	3,000 "
Yutas, (Southern)	200	"	1,400 "
Nabajos	1,000	families	7,000 "
Moques	350	"	2,450 "
Comanches	2,500	lodges	12,000 "
Kayaguas	400	"	2,000 "
Cheyennes	300	"	1,500 "
Arapahoes	400	"	1,600 "
		Total	36,950

You will perceive by the above statement, that with New Mexico, nearly 40,000 Indians will fall under the immediate superintendence of the United States government, and it becomes a subject of serious import, how these numerous and savage tribes are to be controlled and managed.

As it becomes my duty by virtue of my office, to lay before you all the information I possess in regard to these tribes of Indians, I will also venture to make a few suggestions for your consideration.

Agents and sub-agents are absolutely necessary for the regulation and control of the various tribes of Indians above named.

A very desirable effect might be produced upon these Indians by sending a delegation from each tribe to Washington. They have no idea at this time of the power of the United States, and have been so long in the habit of waging war and committing depredations against the Mexicans with impunity, that they still show a disposition to continue the same kind of warfare, now that the territory is in possession of the United States. I am convinced that a visit to our Capital by some of the principal men of each of these nations, would secure future peace and quiet to the inhabitants of this territory.

I would also suggest the propriety of sending with this delegation of uncivilized Indians, a delegation from the "Pueblas," or civilized Indians, who are by law *citizens* of this territory, and of the United States. They compose a very considerable portion of the population of New Mexico, and, if excited so to do, might cause a good

deal of difficulty. A small expenditure by the government in this manner, *now*, might be the means of avoiding bloodshed hereafter.

You are doubtless aware that presents of goods are indispensable in all friendly communications with Indians. I would respectfully suggest the necessity of goods of this kind, or the means wherewith to purchase them, being placed at the disposition of the Superintendent of Indian Affairs for this territory.

I deem it highly necessary to establish stockade forts in the Yuta and Nabajo countries, with sufficient troops to keep these Indians in check, and from continuing their long-accustomed inroads in this territory. One should also be established at some suitable point on the Arkansas River, for the purpose of protecting travellers between this territory and Missouri, and the settlements that may be extended in that direction from the Indians in that vicinity. Another establishment of the kind will be required in the southern part of this territory, to serve as a safeguard against both the Apaches and Mexicans on the frontiers of the adjoining Mexican States, who, it may be confidently expected, will continue to make inroads on th s territory from that quarter for many years to come.

I neglected to mention, in the proper place, that Colonel A. W. Doniphan received orders from General Kearny, before leaving the territory for California, to march his regiment against the Nabajos. Overtures of peace had been made to them without effect; they have continued their depredations up to this time. General Kearny, after leaving Santa Fé, wrote to me, advising that full permission should be given to the citizens of New Mexico to march, in independent companies, against these Indians, for the purpose of making reprisals, and for the recovery of property and prisoners. In conformity with his suggestion, I issued a proclamation to that effect.

Colonel Doniphan left here a few days ago, with his command, for the Nabajo country, and I feel confident that, with the aid of the auxiliary war-parties, he will soon compel the nation to sue for peace, and to make restitution of property and prisoners taken since the entrance of the American forces on the 18th of August last.

The existing laws of the United States, regulating trade and intercourse with the Indians, are, doubtless, amply sufficient as applied to the Indians referred to in this communication, and, at your earliest convenience, I solicit your full and particular instructions in reference to the application of these laws in the regulation of the various Indian tribes above mentioned.

By so doing, you will greatly oblige

Your Truly Obedient Servant,

CHARLES BENT.

6. DACOTAS OF THE MISSISSIPPI.

BY THOMAS S. WILLIAMSON, M. D.

THE subjoined paper is from the pen of Dr. Thomas S. Williamson, of Ohio, who has spent several years among the Dacotas of the Mississippi. In addition to the historical information it conveys of a people who constitute the type of an immense group of prairie tribes, it possesses a particular value for the examination that is given of the medical and surgical knowledge of the Indians. Little has heretofore been done by physicians on this subject, and it is hoped it will attract further notice from the profession. The numbers refer to the printed inquiries, on the various heads of information which were issued in 1847. (Vide Appendix.)

Dr. Williamson settles, definitely, the ancient locality of a portion of the river tribes of the Dacota stock at Milles Lacs, on Rum River, which is, apparently, the ancient location of the "Issati" of Henrepin, and thus restores full credence to this part of the intrepid missionary's narrative.

It is known that the Dacotas have, for more than two centuries, been receding before the fierce and warlike forest clans of the Algonquins, whom the French were the first to supply with fire-arms. The bow and arrow, on which the former long relied, however efficacious in the prairies, is a feeble instrument for men to contend with in thick forests. But, from whatever cause this tribe receded from the north and east at first, it is certain that they are still in the process of being pushed south, from their ancient seats, and annually find their hunting-grounds more pertinaciously intruded on.

The population and statistics of the home band at St. Peters, which is given, may be deemed an earnest of what perseverance in the plan will accomplish.

HISTORY OF THE DACOTAS.

1, 2, and 3. The Dacotas have resided near the confluence of the Mississippi and St. Peters for at least two hundred years. An intelligent man, who has been several years dead, told me they could not tell how long since their ancestors first came to this neighborhood, but suppose it to be equal to the lifetime of four old men, and perhaps more;—counting these lifetimes as 75 years each, would give three hundred years. They say they were residing in this neighborhood before the Assinniboins separated from them. In Vol. VI., page 30, of Lettres Edifantes, Paris, 1781, is a

letter in which it is said, "It is affirmed that the Assinniboins are a nation of the Sioux, which separated from them a long time ago." This letter appears to have been written at Fort Bourbon, on Hudson Bay, about 1695, and the expression *a long time ago,* in this connection, would imply that the separation had taken place at least 50 years previous to that time. The exact period at which they arrived in this neighborhood it is impossible to ascertain, but it seems highly probable it was between the time of the discovery of America by Columbus, and the landing of the Pilgrims at Plymouth, and nearer to the latter than the former event. They say that when their ancestors came to this country it was inhabited by Indians of other tribes, who left the country when they came into it. Most do not pretend to know who were the Indians that occupied the country before their ancestors, but some say they were Iowas. They say that their ancestors, before they came on to the Mississippi, lived at Mille Lac, which they call Isantamde. (Knife Lake.) From their having resided at that place probably comes the name Isanyati, (dwelling at the knife,) by which the Dacotas of the Missouri call those who live on the Mississippi and St. Peters. Most of those with whom I have conversed can trace their origin no farther than Mille Lac, but some tell of wars which their ancestors had with the Chippewas before they came thither; and I have been told that there are those who can trace their origin to the Lake of the Woods. Their traditions all show that they came from the North-east, and are moving to the South-west. Their proper name, Dacota, signifies *allied,* or *leagued together,* and is equivalent to our name United, as applied to the States, and all who are not Dacotas, or allies, are considered enemies, and it is deemed glorious to kill one of them, though descended from the Dacota family; as the similarity of language shows to be the case with not only Assinniboins, but the Winnebagoes, Iowas, Omahaws, Osages, and Quapaws.

There are three grand divisions of the Dacotas: 1. The Isanyati, who reside on or near the waters of the Mississippi and St. Peters, and most of whom plant some corn. These are subdivided into the Mde-wahantonwan, Warpetonwan, Sisitonwan, and Warpekute, and altogether are between 5000 and 6000 souls. Within the memory of persons still living, these all lived near the Mississippi and St. Peters, within narrower space than they now occupy, their eastern limit being about the Falls of St. Croix, north, not far beyond the Falls of St. Anthony, and west, not far from the mouth of Blue Earth River.

2d. The Ihanktonwan, of which the Hunkpatidan and Ihantonwanna are subdivisions. Tonwan signifies to dwell, or dwelling. Ihanktonwan signifies inhabiting the end or extremity, and probably was given them from their having formerly dwelt at the head-waters or extremities of the Mississippi or St. Peters, in which country they dwelt at the commencement of this century. They at present range over the immense prairies between St. Peters and Red River of Lake Winnepec on the north-east, and the Missouri on the south-west, often crossing the latter stream. A few of them plant

on an island in Lac Travers, and a few on the Missouri, but most of them depend for a subsistence entirely on the buffalo. Their numbers are variously estimated at from 4000 to 8000, or even more. Their dialect differs considerably from that of the other divisions, and, like their location, seems to be intermediate between them. Where the Warpetonwan sound h-d, the Ihanktonwan sound k-n, and the Titonwan g-l. Thus the Oglala, a band of the Titonwan, are called by the Ihanktonwan, Oknaka, and by the Isanyati, Onkdaka, from a verb signifying to move as a family. In the Isanyati dialect, *dan*, at the end of words, signifies small, one, or only. The Ihanktonwan speak it *na*, and the Titonwan *la*. There are other dialectic differences, but they are such that a person who speaks one dialect well may make himself understood in the others. It is said the Assinniboins were formerly Ihanktonwan, who broke off in consequence of a quarrel caused by one man stealing another's wife.

3d. Titonwan constitute the last grand division of the Dacotas, and are said to be more numerous than both the others. They are divided into many bands, of which I cannot speak particularly. It is said that none of them plant, and but few of them are found to the north-east of the Missouri, but I have conversed with several Dacotas who say they remember when the Titonwan country was this side of the Missouri, on the Coteau, or hill of the prairie, extending eastward to the St. Peters and Blue Earth Rivers; and, until about the commencement of the present century, I think the Titonwan, at least occasionally, hunted in that country. In the Titonwan dialect, the sounds of l and g hard are both very common. In the other dialects the former is never heard, and the latter only at the end of words.

THOMAS S. WILLIAMSON, M. D.

66. MEDICINE. The difference in regard to the attention paid to the sick is greater among the Dacotas than among white men in the United States. Mothers frequently, and sometimes fathers, watch over their sick children with great assiduity, and manifest the strongest affection. But not only old and decrepid persons, but children also who have no near relatives, and sometimes those who have, are in sickness greatly neglected. Lads and young men, both in sickness and in health, receive usually more attention than any other class of persons.

67. ANATOMY. Dacotas, from their manner of cutting up animals, and the frequency with which all classes of them do it, must acquire far more knowledge of comparative anatomy than most white men possess. Many of them are well acquainted with the names and general form of the bones, the principal viscera and the muscles, both in men and other animals; but I doubt whether any of them have any tolerable idea of the circulation of the blood. I am fully persuaded that most of them know nothing about it; one proof of which is, that they have but a single word by which to name nerves, tendons, veins, and arteries.

Their idea of the pathology of diseases is, that the spirit of something, perhaps a bear, deer, turtle, fish, tree, stone, worm, or of some deceased person, has entered into the sick person, and causes all the distress.

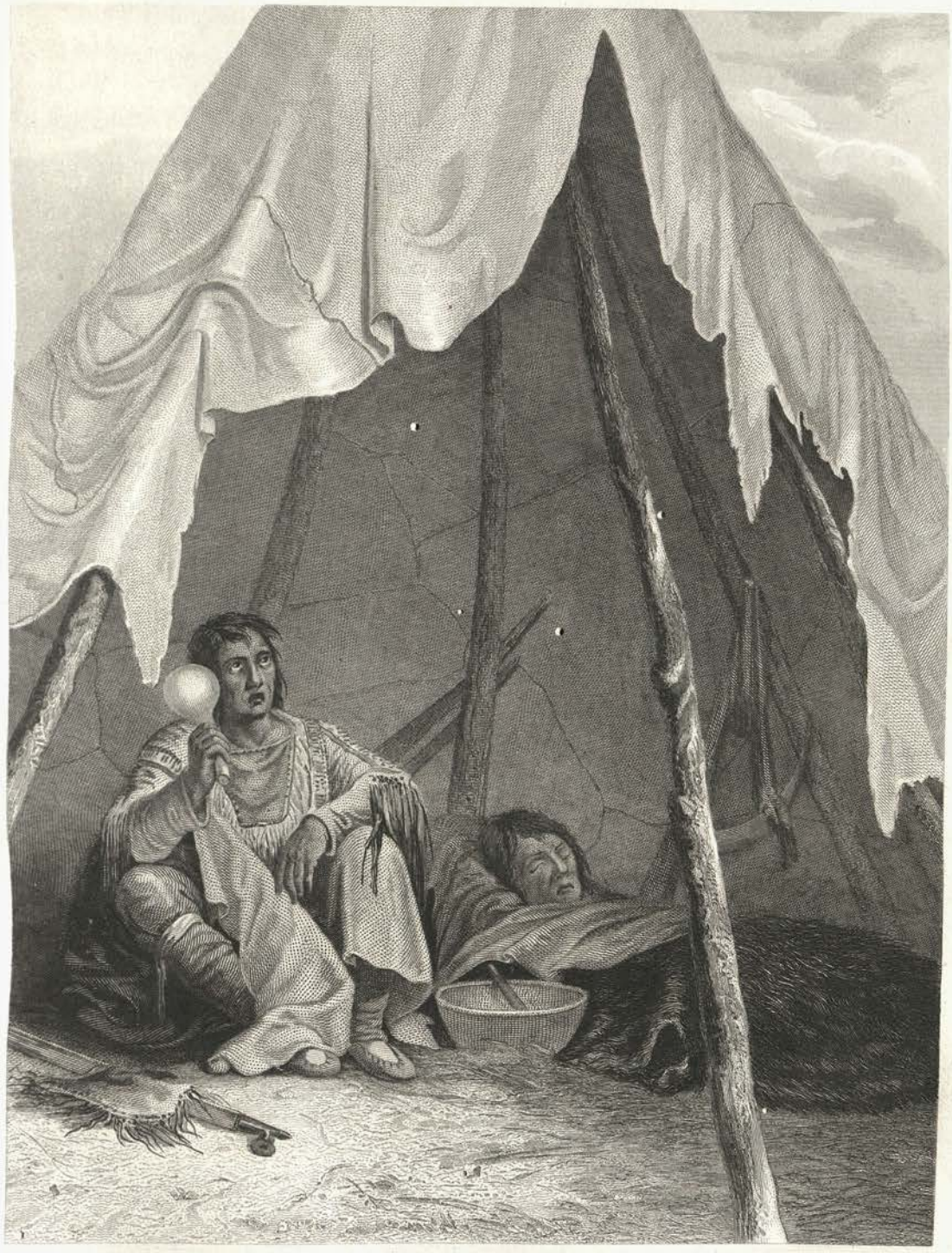
68. According to the theory above given, the pathology of all diseases being nearly the same, their professed medicine-men treat all diseases nearly alike. The main efforts are directed to expelling the spirit, whatever it may be, which it is expected the medicine-man will soon discover; and having informed the friends what it is, he usually requires them to be in readiness to shoot it as soon as he shall succeed in expelling it. This he attempts in the first place, by certain incantations and ceremonies, (see Plate 46,) intended to secure the aid of the spirit or spirits he worships, and then, by all kinds of frightful noises and gestures, and sucking over the seat of the pain with his mouth. As soon as he thinks he has succeeded, he gives the command, and from two to six or more guns are fired at the door of the tent, to destroy the spirit as it passes out.

Some of the medicine-men of the Dacotas rely entirely on conjuring as above described. Others use various remedies, the most common of which is scarifying the neighborhood of the pain, to which, after he has drawn what blood he can by sucking with his mouth, they sometimes apply tobacco, red pepper, or the pulverized root or bark of some of their native plants, among which is the pyrethrum, or pellitory of Spain. They also practise anointing, and sometimes steaming, and sometimes washing the pained part, or, where the pain is general, the whole body. These latter means, however, are not very frequently resorted to, but in nearly all cases of severe sickness they use fumigations; burning on a few coals, in a pan near the sick person, the leaves of the red cedar or other aromatic substance, and sometimes sugar. They are much pleased to get camphor, or any of the aromatic oils, or aqua ammonia, for the sick person to smell and to scent the tent in which he is.

For pain in the head, they scarify the temples. For sick stomach, they endeavor to induce vomiting, and to this end administer the decoctions of certain plants, but have to rely mainly on tickling the throat with a feather. Those who have taken or witnessed the effect of antimonial emetics, in general greatly prefer them to any of their native emetics.

For pain in the bowels, connected with constipation, they use certain roots or seeds of native plants, some of which purge promptly and occasionally severely, but most of which, either from something in their own nature, or in the manner of preparing them, are uncertain in their operation. On this account, they generally prefer castor oil, jalap, or salts, to any of their own purgatives. All who have taken both jalap and rhubarb, prefer the former, on account of its more prompt operation.

To remove constipation and bring away bile, they use clysters, composed of decoctions of certain vegetables, which, in general, are much more efficacious than any of their purgatives, administered by the mouth.



A MEDICINE MAN ADMINISTERING TO A PATIENT.

69. They are very careful to conceal from each other, except a few initiated, as well as from white men, a knowledge of the plants which they use as medicines, probably believing that their efficacy in some measure depends on this concealment.

The purgative chiefly used by the Dacotas who reside on the Mississippi, is the Euphorbia corollata, a tall, handsome, branching plant, which grows abundantly in the open woods and prairies near the Mississippi, from Lake Pepin to St. Peters, and I know not how much farther. If found on the Upper St. Peters, it must be rare in that region, as I have no recollection of having seen it in the neighborhood of Lac qui Parle, where I resided for many years, and the Dacotas in that region are not acquainted with it. A small portion of the root is eaten, and the patient is forbidden to drink anything after eating it. It sometimes operates mildly and effectually; sometimes very violently; and occasionally irritates the bowels excessively, without causing any discharge. I once saw a Chippewa chief suffering from it in the latter way, whose death was attributed by his companions to his having drunk water after eating of this plant. I suspect it not very unfrequently proves fatal among the Dacotas. For their knowledge of this plant, and some others, and of the art of conjuring evil spirits out of the diseased, they acknowledge their indebtedness to the Chippewas. They mostly preserve the roots and barks which they use for medicines in the form of a coarse powder, and administer them in the form of decoction, being very particular in regard to the quantity of water used. One chief design of pulverizing them, is to prevent others from discovering what they are. They are usually kept in skin bags; a bag being composed of the entire skin of some animal, with the hair on, and the otter and mink are most frequently used for this purpose. Often some other article is combined with that on which they chiefly depend, to disguise its taste and smell, and thus prevent it from being discovered.

They mostly forbid their patients who are taking medicine, to drink anything except the water with which the medicine is combined, and have an idea that drinking water, either cold or warm, generates bile. Sometimes they allow them to drink soup, that is, the simple water in which corn, flesh, or fish has been boiled, without any kind of thickening or seasoning. All the drinks which I have found them giving to the sick to quench thirst, are astringent, sometimes slightly bitter, and sometimes slightly mucilaginous. By far the most common, is a decoction of the root of a plant abounding in the western prairies, and commonly called red root, (ceanothus canadensis.)

69 and 74. Their country affords many carminative and aromatic plants, among which are calamus aromaticus, northern mint, and field thyme; but though they use these in water in which they wash, or in oil with which they anoint the patient, and still more frequently burn them as a perfume near the sick, I have never known an infusion of any of them used as a drink by a sick Dacota, except where they had

been taught this use of it by white men. From the nature of the drinks which they allow in sickness, I infer that the assertion that they have not been subject to fevers, is in the main true, and that diarrhœas have been frequent among them.

In the twelve years which I have resided among them, I have conversed with the chiefs and some of the principal men of every village on the Upper Mississippi and St. Peters rivers, and I am persuaded, that if they possess any medicines of much value as internal remedies, the knowledge of them is confined to a few individuals. In saying this, I have reference not to the intrinsic value of their medicines, but to their value in comparison with other articles, well known to educated physicians. At first, they are all afraid to swallow any of our medicines; but such as have once experienced their efficacy, almost without exception, prefer them to their own, provided they can get the same article which they have used.

74. Females, after parturition, and it is said after their monthly courses also, bathe themselves—swim, as they express it, in the nearest river or lake. This is, no doubt, a most efficacious means of arresting the hemorrhage in the former case, and probably imparts vigor to the constitution in the latter; for it is certain, Dacota females are far less subject to what are termed female complaints than white women. It is equally certain they are not exempt from such diseases, for I have seen among them a few cases of almost every form of such diseases. I have not learned that they have any remedies of value in such cases, and am persuaded, that if any such are known to them, the knowledge is confined to a few individuals. I have heard of females among them, who died in labor, and known one or more, who died shortly after parturition, probably from the effects of it. Going into water to arrest uterine hemorrhage, is in general not followed by any unpleasant consequences, even in winter; but I have seen one or two women who suffered severely in consequence of it, for months afterwards. One reason why female complaints are not more frequent among the Dacotas is, that amid the hardships to which Indian females are subjected, such diseases soon prove fatal to most of those in whom the vis medicatrix naturæ is not adequate to effect a cure. They are acquainted with some plants, which, taken by pregnant women, in many cases cause abortion, and sometimes prove fatal to the mother, as well as the child. It is commonly taken by those who have become pregnant without a husband, and not very unfrequently by those who have husbands, but do not wish to be encumbered with another child, mostly because they have already as many as they can carry, unable to follow them in moving.

In cases of tedious labor, those who can procure it take two or three joints of the rattle of the rattlesnake, which they believe to be a medicine of much efficacy in such cases. I once inquired of one of their medicine-men, of more than ordinary intelligence, with whom I was intimate, in regard to the modus operandi of this article. He replied, "I suppose the child hears the rattle, and thinking the snake is coming,

hastens to get out of the way." As the rattle is pulverized before it is swallowed, he doubtless meant the spirit of the child of the rattle, &c.

70. BLOOD-LETTING.—I am not aware that the Dacotas practise bleeding in fevers, except locally for the removal of some fixed pain; and then it is generally done by scarifying with a short piece of flint—sometimes with a knife;—the flowing of the blood is promoted by sucking the place with the mouth, and spirting the blood into a bowl of water. Sometimes they use a tube of horn as a cup, applying the larger end to the skin and taking the smaller in the mouth, but I think this is not common. Sometimes they cord the arm and open a vein; and for this purpose use an instrument smaller, but similar in form to the fleam used in bleeding horses. This instrument they make by tying a sharp piece of flint, or the point of one of their butcher knives, filed off and sharpened for the purpose, to a wooden handle. The point is held over the vein, and by a stroke driven into it as far as the handle will permit. The quantity of blood obtained, even in this way, is usually small, but sometimes they find it difficult to arrest the flow. Those who have had much intercourse with white men, when a vein is to be opened generally prefer to have it done by a white man. Many have applied to me to bleed them. Some for the removal of pains, but more, I think, on account of drowsiness, though in the latter case I have seldom acceded to their request. They cannot bear the loss of as much blood as white men. I have seldom, if ever, drawn to the amount of a pint from an Indian without inducing something like syncope, and have seen many sicken with the loss of one-fourth of that quantity.

71 and 72. I have seen no instance of aneurism among the Dacotas, and the disease is extremely rare among the white population of the Valley of the Mississippi, except the few who are in the habit of using fermented drinks.

They are not acquainted with any styptics, of much power, in arresting hemorrhage from wounds. Very many have applied to me for something for this purpose; and those to whom I have given alum, blue vitriol, or Turlington's balsam, have generally returned, after a time, highly commending the medicine and begging for more. They also highly value cerates, unguents, and medicated oils—such as camphorated oil, Seneca oil, and opodeldoc; also plasters, such as Burgundy pitch, but I have known of no instance of their using any thing of the kind of their own manufacture. Nevertheless, there are individuals amongst them who are very successful in treating wounds and burns. This is doubtless owing chiefly to the great assiduity with which they watch their patients, seldom having more than one at a time. But it is not owing wholly to this. Some of them know how and when to promote or arrest a purulent discharge, as well as most regular physicians. They are especially successful in drying and healing running sores. One of the articles used for this purpose is the dry, pul-

verized root of the asclepies tuberose. I have seen pieces of the inner bark of some species of pine, boiled till it was soft, applied to an extensive surface which had been scalded so as to raise and partially remove the cuticle, some days previous, and it acted not less advantageously than the best preparations furnished by our drug-stores. They make lints of slippery-elm bark, and use them skilfully to promote the discharge of pus from wounds or abscesses; and they wash out such places with syringes of their own manufacture. The number of those who have such skill in the treatment of sores and wounds is not great, and they are chiefly from among the Mde-Wakan-tonwah, who have had much more intercourse with the Chippewas, and with white men, than others of their tribe. This seems to confirm their assertion that they have acquired their knowledge of medicine from that tribe. The roots and barks which they apply to wounds and burns, are generally prepared for that purpose by mastication, and are spread on thinly and suffered to dry. Sometimes they cover it over with moistened paper, to make it adhere, or to protect the surface from the external air.

73. AMPUTATION.—The Dacotas never amputate a limb, but laugh at the folly of white men for doing it. I have heard individuals, to whom it was proposed, declare that they would rather die than have an arm or foot cut off. There may be, and I suppose are, a few individuals skilful in the application of splints and bandages, and of compresses to arrest hemorrhage; but where I have witnessed the use of such things, they were applied without skill or success, which was the occasion of my seeing them.

For carrying the sick or wounded, or a dead body, they make a litter speedily and skilfully, more so than is common among white men. For this purpose they take two poles, four or five feet longer than the person to be carried, and place them on the ground parallel, and two or three feet apart. Across these, at proper distances, are laid two short poles, at right angles with the first, and these are tied firmly to their places by leathern thongs. Over these poles is laid a blanket or buffalo-robe, which is stretched and tied in the same way. On this the invalid is laid. Two carrying straps are now tied to the ends of the long poles, in such a way that when the carrier stands between them, with the middle of the strap resting firmly on the top of his head, he can easily seize the ends of the poles in his hands. When they move, a person at each end of the litter stoops, and having adjusted the strap across his head, seizes the long poles with his hands, and rises, (if need be, with the assistance of some of the by-standers,) and they march off, each walking in the path, and in this way a person sick or wounded is sometimes carried securely many miles in a day, through a country destitute of any road for wheel-carriages or horses.

74. So far as I have had an opportunity of observing, they have very little skill in

the treatment of imposthumes and eruptions; generally choosing to apply to them any kind of grease. They know that imposthumes should be opened, but most of them are afraid to have the operation performed. Proper phlegmons are very rare among them, while carbuncles are frequent. Scrofulous swellings and sores are also frequent, especially when they subsist chiefly on corn and muskrats.

Their failure in the treatment of small-pox is owing to the fact that it is a febrile disease, and they know nothing about the proper treatment of fevers.

Men sometimes conjure over, and sometimes administer medicine to, parturient women. I have heard of no instance of their doing more, but cannot say they never do. I have heard of one case in which the hand of the child presented, and after twelve or twenty-four hours it was supposed the child was dead, and, to save the life of the mother, the arm was cut off, and the child brought away in pieces, but the operation was performed by women who professed no particular skill in such business, but did it because they were hired to do so.

75. Paralysis they always attribute to the agency of some spirit; generally that of some deceased person. Of course, the treatment consists entirely in efforts to drive away the spirit by conjuring and uncouth noises. They use the vapor-bath, made by pouring water on hot stones, sometimes successfully for the treatment of rheumatic pains, and, perhaps, of other diseases also. This bath is also used for the removal of ceremonial uncleanness, such as created by killing a person, or touching a dead body.

106 and 108. Legislation of Congress.—Laws made for the benefit of Indians should be equal laws, inflicting the same punishment on the perpetrator of a crime, whether he be white, black, or red, and affording equal protection to the persons and property of all. Many of the present laws are unequal;—at least, as interpreted by the agent near Fort Snelling,—and they are nearly useless; for where two races of men come in contact, unequal laws, in favor of the weaker, can never be enforced against the stronger. As the law is interpreted, if a white man kills an Indian, the officers of the United States must seize him and have him punished; but if an Indian kills an Indian, they must not interfere. The law denounces a heavy penalty against persons carrying intoxicating drinks into the Indian country; but, our agent says Indians are not persons, in the eye of the law; and so the country is flooded with intoxicating drinks, and murders are frequent; and for these offences no one is punished according to law. If the law denounced a proper penalty against every individual who steals or destroys another's property, whether he be Indian or white man, and made provision for remunerating the injured individual in all cases where the guilty has any property or claims on the United States government, the Indian would be stimulated to industry by the prospect of improving his condition. At present he has no such stimulus; for if by superior industry or economy he should

acquire any species of property which his neighbors have not, he knows that the envy of some of them will be aroused, who will take or destroy it, and that he can have no redress.

A law to prevent, in time to come, white men who cannot read and write from entering the Indian country, either as boatmen or otherwise, would be useful in promoting civilization among the Indians. At present most of the labor in the Indian country is performed by unlearned foreigners, whose influence on the Indians is injurious in several ways, but chiefly as it tends to make labor dishonorable.

111. One of the most effectual laws which could be made to prevent the introduction of ardent spirits into the Indian country, would forbid any person from keeping alcoholic drinks on lands the property of the United States, and require the officers of the army, when they have reason to suspect that such drinks are kept in any house on such lands, to search the house, and in case intoxicating drinks are found, to destroy all such drinks and the house or houses in which they may be found. It would tend much to promote the same object, if, in all future treaties with the Indians for the purchase of land, it should be stipulated that so far as intoxicating drinks are concerned, the lands ceded shall be considered Indian country till the same shall be sold; or at least, till they shall be surveyed and offered for sale.

115. Among a people like the Dacotas, annuities should in all cases, as far as practicable, be paid to heads of families rather than the chiefs. Many of the horses given to the Dacotas and distributed by their chiefs, have been shot soon after they were distributed, because some of those who received none have thought they had as good a right to a horse as some of those who received one. To guard against this, when horses or cattle are sent to Indians in payment of annuities, a sufficient number should be sent at one time to give one to each family, or a greater amount of money or goods should be given to those who do not get a horse or cow, so that all the families, in proportion to the number of members they contain, might be nearly on an equality.

THOMAS S. WILLIAMSON.

7. THE SMALL-POX, A SCOURGE TO THE ABORIGINES.

No disease which has been introduced among the tribes, has exercised so fatal an influence upon them as the small-pox. Their physicians have no remedy for it. Old and young regard it as if it were the plague, and, on its appearance among them, blindly submit to its ravages.

This disease has appeared among them periodically, at irregular intervals of time. It has been one of the prominent causes of their depopulation. Ardent spirits, it is true, in its various forms, has, in the long run, carried a greater number of the tribes to their graves; but its effects have been comparatively slow, and its victims, though many, have fallen in the ordinary manner, and generally presented scenes less revolting and striking to the eye.

This malady swept through the Missouri Valley in 1837. It first appeared on a steamboat, (the St. Peters,) in the case of a mulatto man, a hand on board, at the Black-Snake Hills, a trading post, 60 miles above Fort Leavenworth, and about 500 miles above St. Louis. It was then supposed to be measles, but, by the time the boat reached the Council Bluffs, it was ascertained to be small-pox, and had of course been communicated to many in whom the disease was still latent. Every precaution appears to have been taken, by sending runners to the Indians, two days ahead of the boat; but, in spite of these efforts, the disease spread. It broke out among the Mandans about the 15th of July. This tribe, which consisted of 1600 persons, living in two villages, was reduced to 31 souls. It next attacked the Minnetarees, who were living in that vicinity, and reduced that tribe from 1000 to about 500. The Arickarees, numbering 3000 souls, were diminished to some 1500.

The disease passed from these to the Assiniboins, a powerful tribe of 9000, living north of the Missouri, and ranging in the plains below the Rocky Mountains, towards Red River of Hudson Bay, whole villages of whom it nearly annihilated. This tribe had their principal trade with Fort Union, at the mouth of the Yellow-Stone.

The Crows, or Upsarokas, extending west from this point across the plains to the Rocky Mountains, who were estimated at 3000 strong, shared nearly the same fate, and lost one-third of their numbers.

It then entered and spent its virulence upon the great nation of the Blackfeet, who are known under the various names of Blood Indians, Piëgans, and Atsinas. They have been estimated at 30,000 to 50,000. The inmates of 1000 lodges were destroyed. The average number in a lodge is from six to eight persons.

Granting everything that can be asked on the score of excitement and exaggeration, not less than 10,000 persons fell before this destroying disease, in a few weeks. An eye-witness of this scene, writing from Fort Union on the 27th of November, 1837, says:—"Language, however forcible, can convey but a faint idea of the scene of desolation which the country now presents. In whatever direction you turn, nothing but sad wrecks of mortality meet the eye; lodges standing on every hill, but not a streak of smoke rising from them. Not a sound can be heard to break the awful stillness, save the ominous croak of ravens, and the mournful howl of wolves, fattening on the human carcasses that lie strewed around. It seems as if the very genius of desolation had stalked through the prairies, and wreaked his vengeance on everything bearing the shape of humanity."

Another writer says:—"Many of the handsome Arickarees, who had recovered, seeing the disfiguration of their features, committed suicide; some by throwing themselves from rocks, others by stabbing and shooting. The prairie has become a graveyard; its wild-flowers bloom over the sepulchres of Indians. The atmosphere, for miles, is poisoned by the stench of the hundreds of carcasses unburied. The women and children are wandering in groups, without food, or howling over the dead. The men are flying in every direction. The proud, warlike, and noble-looking Blackfeet are no more. Their deserted lodges are seen on every hill. No sound but the raven's croak, or the wolf's howl, breaks the solemn stillness. The scene of desolation is appalling, beyond the power of the imagination to conceive."

8. TRIBES ON THE SANTA FÉ TRAIL, AND AT THE FOOT OF THE ROCKY MOUNTAINS.

THE tendency of the Indian population, which stretches over the prairies east of the Rocky Mountains, is towards the south and south-west. The Cheyennes, or Chawas, who once lived on a tributary of the Red River of Hudson's Bay, crossed the Missouri, in consequence of the arrival of the Algonquin tribes on the sources of the Mississippi. The latter went as far north as the summit of the Portage du Trait, in their progress towards Athabasca Lake. The Chawas are now found very high on the Nebraska, and pressing onwards southward, below the mountains. The Sioux, or Dacotas, of the Missouri are pressing in the same direction, occupying positions less westerly. The Dacotas of the Mississippi, who have not yet broken up their more easterly villages in Minnesota, are destined to pass in the same direction. The pressure upon these tribes is from the north. They have receded, in the last quarter of a century, (dating from the treaty of boundaries of Prairie du Chien, in 1825,) before the military ardor of the Algonquins, and cannot now be said to have permanent or safe footing north of the river St. Peters.

The Arapahoes, who infest the sources of the Platte and Arkansas, are a part of the Atsina, or Fall Indians of the Blackfoot stock, and once lived on the Assinabwoin and Saskatchiwine. The Minnatarees and *Gross Ventres* proper, who speak the Absaroka or Crow language, are, to a great extent, mingled with the parent tribe, and occupy the eastern slopes of the Rocky Mountains. These snowy peaks are so elevated as to prevent their being crossed at any point between the Jefferson Fork of the Missouri and the Southern Pass, at the sources of the Nebraska. This fact appears first to have been demonstrated by the party of Mr. Hunt, who, in 1810, attempted, under Mr. Astor's auspices, a more northern pass, but who were, eventually, after skirting the mountains, thrown upon the head-waters of that river.

Mr. Thomas Fitzpatrick, the government agent for the higher Platte and Arkansas, refers to this concentration of Indian population below the mountains, and on the plains leading to Santa Fé, as one of the pregnant causes of the difficulties and dangers which have, of late years, beset the path of the merchant and emigrant.

Of the bands south of the range of his extensive agency, as observed in 1847, his estimates of population require to be compared with those of the late Governor Bent,

of New Mexico, of 1846, and of Ex-President Burnet, of 1847, herewith furnished, and of Mr. Robert S. Neighbours, Special Agent in Texas in 1847.

Mr. Fitzpatrick, from whose correspondence we introduce extracts, has had much experience in the adventurous scenes of that district, speaks some of the Indian languages, and communicates his views and opinions with a degree of confidence which is the result of a long acquaintance with life in the Indian country. He communicates the important fact, before indicated by imperfect vocabularies, that the Comanches of Texas are but an off-shoot of the Shoshonee or Snake stock; that their several bands speak close dialects of the same language as the mountain tribes; and that this language, in its several dialects, spreads through the great Salt Lake Basin to California, as well as northwardly into the Columbia Valley.

Of the mass of the strength of the aboriginal population south of these limits we can speak with less confidence than of the bold, predatory, and reckless hordes north of them.

"My own imperfect knowledge of the country," he observes, "and its inhabitants south of the Santa Fé trail, in the direction of Texas, prevents me from saying anything positive upon the subject. Yet I believe that the Comanche Indians do not exceed 1000 lodges, and as it is rare that more than one warrior occupies a lodge, amongst them, we may put them down at the very utmost, 1200 warriors. They are divided into three different and distinct bands; but who always, and when necessary, unite and co-operate in concert. Those bands have different names, but speak the same language, which is that of the Shoshonee or Snake on the west side of the Rocky Mountains, as well as great numbers of Indians on, and south of the Columbia River, and those inhabiting the Great Desert west of the Great Salt Lake, and on the very confines of California; all speak a dialect of the same language. The names of the different bands are as follows: Yampatick-ara, Cools-on-tick-ara, Penoi-in-tickara, all of which are Snake or Shoshonee words, and being translated into English, mean, Root-eaters, Buffalo-eaters, Sugar or Honey-eaters. These three bands, united with the Kioways, which are very few in number, are what we have to contend with at present on the Santa Fé road."

In the month of October, 1848, the same observer takes a deeper view of this pressing and irresponsible mass.

"The subject of the printed circular accompanying a series of inquiries respecting the 'History, Present Condition, and Future prospects of the Indian Tribes of the United States,' (Vide Appendix,) is one of immense magnitude, and would require years of close application and study, besides a perfect knowledge of their various tongues, and that knowledge too, being in the individual himself, as it is somewhat difficult to reach any subject in regard to those people, through any interpreter I have ever met in this country, apart from the ordinary concerns of every-day life. It is a remarkable fact, that the most ignorant and weak-minded are those who most readily

acquire a knowledge of the Indian tongues orally. From this cause it is a very difficult matter to arrive at anything like correctness. And to it may be attributed the many falsehoods and exaggerations put forth to the world, by travellers and others, who obtained their information from men who had neither a proper knowledge of their own mother tongue nor of that of the Indian. And in nine cases out of ten such persons do not and cannot comprehend what the book-makers, or travellers, wish to arrive at, because they are subjects that never before entered their minds. These remarks will apply equally to all the writing I have ever read on the subject; at least so far as my own opinion goes. I will further remark, I fear the real character of the Indian can never be ascertained, because it is altogether unnatural for a Christian man to comprehend how so much depravity, wickedness, and folly, could possibly belong to human beings, apparently endowed with a reasonable share of understanding. Let the civilized man, if possible, divest himself of all partiality and prejudice, and view the Indian impartially, just as he finds him, without attempting to cast imputations on anything but the right cause, which is their own innate proneness to evil, and it will be found that that very innate principle of wickedness and depravity, is the great cause of hastening them off to destruction; I believe, moreover, that all the aid from the wealthiest governments of Europe, united with that of the United States, could not redeem or save a tithe of those people, inasmuch as I consider them a doomed race, and they must fulfil their destiny. Yet it is a generous and praiseworthy exertion in the government to do all it can for them.

In regard to the manners, customs, habits, &c., of the wild tribes of the Western Territory, a true and more correct type than any I have ever seen, may be found in the ancient history of the Jews or Israelites after their liberation from Egyptian bondage. The 'Medicine Lodge' of the Indians may be compared to the place of worship or tabernacle of the Jews; and the sacrifices, offerings, purifications, ablutions, and anointings, may be all found amongst and practised by those people.

The customs of Indian women at certain periods and after childbearing, are almost those of the Jewish women. They have to undergo a probation of a certain number of days on all such occasions, besides ablutions and purifications, before they are considered fit to enter on their domestic duties; during this probation they are considered unclean, and altogether unfit to enter the lodge or join with the family; which, indeed, they never attempt; but erect a hut for themselves, where they remain the whole time; having their food brought to them.

The manner of mourning for a deceased relative is very similar to that of the Israelites; in such cases the men will cast off all their finery, and put on instead (if they put on anything) the most worthless garments, and keep their heads, and often the body, bedaubed with white clay during the time of mourning, which sometimes lasts ten moons; this might be called putting on sackcloth and ashes. The women, on the other hand, cut off their hair, and otherwise disfigure their persons by cutting

with a flint or sharp stone their face, arms, and legs, in such a way as to let a great deal of blood flow in the operation, which is never washed off until they cease to mourn.

In cases of death, if the deceased happens to be a distinguished man, they will kill for his use two or three of his favorite horses, and inter with him arms, pipe, and tobacco, with many articles which he was known to have fancied when alive. They do not seem to be inclined to bury their dead in the ground, although they sometimes do so, and in a very careless manner, as the wolves invariably dig them up; they will sometimes put them high up in large trees, until decomposition takes place, and nothing is left but the bones and hair, which they will gather carefully and perhaps carry about with them for a length of time, or until they find a favorable spot, where they will deposit them without ceremony, and, I believe, privately. But their favorite places of interment are in caves or crevices of rock, from which they are never removed.

There could be very numerous and similar analogies made between the manners and customs of those people, and those of the Jews; but when we see nearly the same traits of character, manners, customs, &c., manifested in every part of the globe where a barbarous people have been found, I have come to the conclusion that man in that state is pretty much the same sort of being throughout, except what difference may naturally arise from the physical adaptation of the country they inhabit in supplying their wants.

In regard to the Indians of this agency, as well as all the roaming tribes of this vast extent of country, I can assert with a great degree of certainty, that they have no fixed laws, or anything like permanent institutions, by which to regulate their concerns, either between themselves or other tribes, except what may be decided from time to time in their councils, or from emergencies arising out of the uncertainty of their relations with other tribes; and to this fact alone may be attributed their constant warring on each other; as the most insignificant being of any one tribe may be the cause of bringing on a war with any other tribe, which may last for years, and without the least dread of punishment from his own tribe. In proof of this, I will relate an occurrence which took place here a short time ago. The Cheyennes, who were encamped near, came to the Fort for the purpose of honoring us with a dance; which is the usual custom of those tribes when they wish to exibit their satisfaction for the treatment received. They were dressed in all the wildness and decoration of their native costume, and altogether made a very interesting appearance. They commenced and pursued the dance with all the wild and varied gesture of such scenes, until an old woman entered the circle of the dance, apparently bleeding from every pore; her face, legs, and arms were bleeding profusely, which gave her a most hideous appearance. In this state, she exhorted the warriors in her behalf, and "to take pity on her; that she was old, and had had her only son killed by the Aripahoes last

spring, and the murder has never been atoned for." At this critical juncture a courier came running in with intelligence that people were discovered in the distance.

The warriors immediately broke up the dance, mounted their best horses, and pursued the strangers; and late that night returned with two Arapahoe scalps, and a squaw as prisoner. This circumstance, no doubt, reconciled the old woman for the loss of her only son. This law of retaliation, or some mode of remuneration in the shape of payment for the slain, is the only law recognised by the natives of this country. I have taken measures to put a stop to further bloodshed for the present; but where there is no law to punish individuals for committing depredations on other tribes, not even in the most aggravated case, their relations of good fellowship must always be in a very precarious state.

I shall make it my business, hereafter, to take more pains in investigating the various subjects contained in the series of inquiries received; but I consider it highly improper to write anything at random, for the information of the Department, and therefore will decline saying much at present, except that which I am convinced of being correct; and I sincerely wish that every one whose business it is to write on this subject, would adopt the same course. Then, indeed, we might have hopes of some change for the better management of the Indian tribes. Nothing, in my opinion, has been more prejudicial to the welfare and improvement of the Indians within the territory of the United States, than the great forbearance and constant humoring of all their whims, together with the erroneous opinion existing, that nothing but the introduction of Christianity was wanting to make them happy and prosperous.

I am not one of those who expect and look for the immediate improvement and civilization of the Indian tribes by the means generally recommended, as I am well aware they will have to pass through a long and protracted ordeal, before they can even attain the first step to civilization; and I have yet to learn and decide, whether the full-blooded Indian is capable of such a change, inasmuch as I have never discovered any great advancement, either moral or physical, (the many favorable reports to the contrary notwithstanding,) which makes me very sceptical on the subject. I have met with but few Indians whom I thought were prepared to receive instruction in civilization and Christianity, which are some of the tribes on the Columbia River and its tributaries; and to the severe but just administration of the Hudson Bay Company may be attributed their now prosperous state. On their first acquaintance with whites, the Oregon Indians were disposed to be mischievous, as all other Indians: but after the British took possession of that country, and the Hudson Bay Company established there, the Indians were taught very severe lessons, on all and every occasion when they misbehaved; and not the slightest injustice or crime was ever allowed to pass unpunished. And at length they ascertained, that to do unto others as they would have others do unto them, is by far the best policy; they also learned that the God of the white people was by far the most powerful, and

have for many years been desirous of learning how to worship and please Him. And long before a missionary went into that country, those people were as honest, kind, and inoffensive as any I have ever met, either civilized or savage, and, I believe, in a few years will be in a more prosperous state than any Indians within the boundary of the United States. There is a great deal which ought to be taught an Indian before the attempt is made to Christianize him; some of which tuition may be taken from the remarks above, in regard to the Columbia Indians."

It has been thought right to present this view of the state of the prairie-tribes, from a man whose means of observation, good general judgment, and honesty of purpose in the public service, are unimpeached. So far as respects their manners and customs, their wild and predatory lives, and the utter want of reference of their acts to any moral or legal standard, these remarks are sustained by the best and latest authorities; and this wild and irresponsible state of life is well described by Mr. Parkman as existing among the Arapahoes. With regard to Christianity, and its application to such tribes, surrounded by so many continually pressing circumstances, to prevent its appreciation, introduction, or spread, it need only be said, that the observations denote an entire misapprehension of the subject. Fixity of location and agricultural industry are among the very first fruits aimed at by our teachers among all the nomadic tribes, without which no success can be anticipated. As a general fact, these tribes are surrounded by circumstances which are so perilous that they are, at present, very much beyond the circle of practical missionary effort.

9. SOME INFORMATION RESPECTING THE CREEKS, OR MUSCOGEES.

LITTLE has been written respecting the traditions of the Muscogees. The wild and extravagant relations respecting a powerful people, who are described as residing in Florida in the 16th century, under the name of Apalachites, appear to be better suited to the purposes of romance than history.[1]

The following traditions and opinions of their origin, early history, and customs, are from the lips of Se-ko-pe-chi, (Perseverance,) one of the oldest Creeks, now living in their new location west of the Mississippi. They were taken down from his narration, by Mr. D. W. Eakins, who was for some time a resident of the territory now occupied by them west of the state of Arkansas, and have been communicated in reply to the printed inquiries issued in 1847, respecting the History, Present Condition, and Future Prospects of the Indian Tribes of the United States. (Vide Appendix.)

There is a general reluctance, on the part of the Creeks, to enter at all upon subjects of this character, owing in a measure to their superstitious notions, and more, perhaps, to their innate disposition to secrecy, and the general spirit of concealment.

The admission of an inter-tribal rank, in ancient days, inferior to the ancient Lenno Lenápi, and their concurrence in the general title of Grandfather, ascribed by the North Atlantic tribes to that important branch of the Algonquin stock, denotes a more recent origin to their nationality than has been supposed to exist; and adds but another proof to the many we have had before, of the limited character of the Indian traditions, and the recent date of their entire tribal relations.

There is nothing in these reminiscences of Se-ko-pe-chi which can be employed to sustain an opinion that the Muscogees are, in anywise, to be deemed as having founded their nationality on pre-existing tribes, of any known historical era, who were semi-civilized.

The advance of the masses in this tribe, in late years, has not kept pace with that of the families of their chieftains. The authority of the latter, founded on ancient distinctions and the force of descents, appears to commend itself, very generally, to continued respect and adherence.

It is necessary, in the following inquiries, to conceive the Muscogee chronicler, Se-ko-pe-chi, as the respondent. The views of Mr. Eakin, where they are given as

[1] Vide Davis' Caribees. London, 1666.

independent opinions, will be readily distinguished, and are evidently moulded, in some instances, on the queries before him. The true grounds of the interrogatories are, however, seldom, if ever, misconceived by him, unless it be in the policy to cede surplus territories when they have become denuded of game, and, perhaps, the true extent of the civil power of the chiefs. — ED.

"1. The origin of the Alabama Indians, as handed down by oral tradition, is, that they sprang out of the ground, between the Cahawba and Alabama Rivers.

2. The Muscogees formerly called themselves Alabamians, but other tribes called them Oke-choy-atte, (*life*). The earliest migration recollected, as handed down by oral tradition, is, that they emigrated from the Cahawba and Alabama Rivers, to the junction of the Tuscaloosa and Coosa Rivers. Their numbers, at that period, were not known. The extent of the territory occupied at that time was indefinite. At the point formed by the junction of the Tuscaloosa and Coosa Rivers, the tribe sojourned for the space of two years. After which, their location was at the junction of the Coosa and Alabama Rivers, on the west side of what was subsequently the site of Fort Jackson. It is supposed that at this time they numbered fifty effective men. They claimed the country from Fort Jackson to New Orleans, for their hunting-grounds.

3. They are of the opinion that the Great Spirit brought them from the ground, and that they are of right possessors of this soil. Before the settlement of what is now known as New Orleans, they discovered, at that place, two Mexicans; and at a subsequent period, during a visit, they met with a large number of whites. The first sale of lands by treaty took place in New York: the date is not recollected.[1] They first became acquainted with the use of fire-arms, clothing, &c., through the Spaniards. Ardent spirits have been in use among the tribe, beyond the recollection of the oldest citizens. Their first places of trade were at Mobile and New Orleans.

4. They believe that before the Creation there existed a great body of water. Two pigeons were sent forth in search of land, and found excrements of the earth-worm; but on going forth the second time, they procured a blade of grass, after which, the waters subsided, and the land appeared. They do not believe that their ancestors occupied any other lands, but always had their locality in North America. They believe that domestic animals were introduced by the whites. They have no knowledge of the land being pre-occupied by the whites, or a more civilized people than themselves. But they do believe that the land was pre-occupied by a people of whom they have no definite knowledge.

[1] 1790. Indian Treaties, page 29.

5. The only name they have for America is, The Land of the INDIANS. They call it the land of the Red people. They have no other oral tradition of any other name for America.

6. In the reminiscences of their former condition they state, that they enjoyed a greater degree of peace, before the discovery of the continent by the whites, than they did afterwards. They had no treaties, no alliances, or leagues, previous to the discovery. They erected breast-works, of a circular shape, for the protection of their families. These mounds had no existence previous to their arrival.

7. In their names and events as helps to history, they pride themselves most upon killing their enemies, and by memorializing these events with their hieroglyphics, and decorating themselves. Their greatest source of grief was the death of a son, brother, father, or mother. They conquered a people who wended their way south. There have been subsequent conquests. They had never been conquered until their conflicts with the whites. They have never suffered from wild-beasts, floods, diseases, or sudden attacks, from which they had no deliverance.

8. The present rulers of the nation consist of a first and second chief, who, in connection with the town chiefs, administer the affairs of the nation in general council. The present principal chief, General Roly McIntosh, is of Scotch descent. The second chief, Benjamin Marshall, is of Irish descent: both the friends of the white man. The former fought, under General Andrew Jackson, against the hostile Indians. The tribe, at present, is in a very prosperous condition, and rapidly increasing. The Creeks first commenced immigrating to their new country, west of the Mississippi, in parties, in 1828, from which period until 1837 the principal part of the immigration took place. Small bodies of Creeks, however, still continue to arrive in their new country up to the present time. The circumstances under which they reached their present location were the treaty with the United States, and an unwillingness to fall under the State laws of Georgia and Alabama. This feeling still exists among them: they have their doubts about being prepared to take part in deliberate assemblies. The south-western tribes occupy different stages in civilization, some being nearly wholly civilized, others partially so; and others, again, retaining the wandering habits of their forefathers, may, with propriety, be termed hunter tribes.

9. All the south-western tribes speak different languages; except, perhaps, the Choctaws and Chickasaws, and the Creeks and Seminoles, which languages have a strong affinity to each other.[1] The different tribes do not understand each other. There is

[1] The question of language will be hereafter examined.

no community of interest among them; for that which promotes the interest of the hunters induces the agriculturists to idle away their time, and neglect their farms. Nor is there any commercial intercourse, worth speaking of, among them; and, indeed, there is but little intercourse of any kind, if we except the traffic in stolen horses. Their opinions and customs, in many respects, are different; that which is regarded as a virtue by the civilized Indians, is considered as a weakness by the hunters; and those actions which are regarded as manly and heroic by the wandering tribes, are looked upon as vices when practised among the semi-civilized. There can be no system of judiciary established among them in which all these tribes could unite.

The Muskogees speak six different dialects, viz., Mus-ko-gee, Hitch-i-tee, Nau-chee, Eu-chee, Alabama, and Aquas-saw-tee. The Creeks, although speaking these different dialects, understand, generally, the received language of the nation, which is the Mus-ko-gee or Creek language; and consequently the business with the government requires but one interpreter. There are several aged persons who can state their traditions, but they are reluctant to do so.

10. INTERNATIONAL RANK AND RELATIONS. — The rank and relationship which this tribe bears to the other tribes, is that of Grandchild to the Delawares and Senecas. Their traditions assign them a medium position in the political scale of the tribes. Whether this relationship is sanctioned by the tradition of all *other* tribes is not known; but by *some* it is. Discordant pretensions to original rank and affinities of blood have never occurred among the Mus-ko-gees. They have no method by which blood affinities can be settled in cases of difficulties. The kindredship of the tribe is denoted by terms taken from the vocabulary of the family ties. The Mus-co-gees call the Delawares Grandfather.

11. The monumental proofs of their intercourse with other tribes, such as alliances, leagues, and treaties of friendship, are testified to by *wampums*, *pipes*, and *belts*.

12. The clans are made up of families; each clan adopting its own peculiar badge; such as Crocodile, Bear, Bird, &c. It is supposed that these badges *do* denote rank or relationship.

13. Geographical features, within the memory of tradition, are not looked upon as a cause of the multiplication of the tribes. The Comanches have an immense country over which they range, but it is not known that it contributes to their increase. This is also the case with the Osages; but for some years past both these tribes have been on the decrease. And this must continue to be the case, so long as their women are compelled to undergo the severe corporeal labor which the men exact from them. The tribes that are progressing most rapidly are those who are making advances in

civilization and religion. When the female gains her rightful position as *an equal*, and is no longer looked upon as *an inferior*, then will we have the true solution of the problem in regard to the multiplication of the tribes. This solution is true in regard to the Cherokees, Choctaws, Chickasaws, and Muskogees. Magnitude and resources of territory are not generally conceded as entering in as *the* cause of the multiplication of the tribes. Magnitude is generally looked upon as a detriment. Dissensions have sometimes driven individuals to other tribes; but there are no instances within the recollection of the oldest citizens in which these dissensions have led to the formation of new tribes or dialects.

14. In their traditions of the original rank and movements of the tribe, there is no mention of rivers or mountains. The general track of their migrations was from the West.

15. GEOGRAPHY.—Of the shape of the globe and its natural divisions, they have no definite idea. They generally entertain the belief, however, that the earth is a square figure, and entirely surrounded by water; and by going to the verge of the plain, they could step off.

16. The chief rivers occupied by the tribe are the Arkansas, Verdigris, Canadian, North Fork of the Canadian, and Red Fork. The Arkansas is navigable as high as the mouth of the Verdigris about one-half of the year; this depends altogether upon the state of the season; it is about 1000 miles in length. Grand River is supposed to be navigable for about 100 miles, but it has not yet been attempted. The Verdigris is obstructed by a fall near the mouth. North Fork is navigable a short distance. Red Fork is not generally believed to be navigable; the mouth of it is about seventy-five miles above the navigable portion of the Arkansas; the Arkansas is about one-quarter of a mile wide; Verdigris and Grand Rivers about one-eighth; the others probably about the same. Goods are landed at all the principal points between the mouth and Creek Agency on the Arkansas; the Grand and Verdigris Rivers have each but one landing near their mouth; the first at Fort Gibson, the latter at the Creek Agency. All these are tributaries of the Arkansas. The surface of the country, generally, is level; abounding in prairies, with a goodly portion of bottom land. There is an abundance of timber; such as oak, cotton-wood, and black-walnut; but little cedar, and still less pine. Attention is being directed to the cultivation of fruit; the peach, however, is already found in great abundance.

17. The springs, throughout the nation, are quite numerous, but not large. There is a lake on the Verdigris River, about eight miles from its mouth. The outlet is supposed to be into the Verdigris. It is fresh water, and about two miles in length,

and half a mile in breadth. There are no lakes that can be navigated by steamers. There are no springs that afford sufficient water-power for practical purposes.

18. The general surface of the country is level; and also fertile. Sufficiency of wood and water. Abounding in meadows and prairies. They raise corn, some wheat, potatoes, turnips, &c. There are no natural vegetable productions.

19. The facilities for grazing are very good. Cattle and stock are easily raised on the extensive prairies, and in the bottom lands. The woods afford some spontaneous herbage. Wells of water are obtained at moderate depths, where there are no springs. There is always a practicable market for the surplus grain and stock at Fort Gibson and Fort Smith.

20. The practice of firing the prairies, has the effect of retarding the growth of timber. Prairie lands that were settled years ago, are now surrounded with timber, which is accounted for, by the fire being kept off.

21. There are no waste lands that offer any great obstacle to the construction of roads. There are marshy places along the Arkansas that are considered unhealthy; in some cases these marshes are formed by the springs, and not by the rivers.

22. The volcanic tracts are not extensive, and they afford a supply of herbage for stock.

23. The climate is generally of a medium character. The heat is distributed very similar to that of the Middle States. The south winds prevail. The streams sometimes overflow their banks, which is generally attributable to the melting of the snows upon the mountains. Tornadoes have seldom, if ever, occurred.

24. Salt springs are found on the south side of the Arkansas, above the mouth of Grand River.

25. Coal has been found in abundance along the Arkansas River. Other minerals doubtless are to be found in the nation.

26. Nearly all the wild animals have disappeared, except the wolf and deer. The fur trade has had the effect to diminish the value of the country for hunting.

27. The bones of a mastodon were found in the Arkansas River.

30. The horse, with other domestic animals, they suppose to have been introduced by the whites.

31. They are not expert in drawing maps or charts. I have never seen any specimens.

32. ANTIQUITIES. — There are two stones with foot-prints on them, but whether or not they are the result of human industry is not known

47. ASTRONOMY. — Their amount of knowledge on this subject is very limited. They believe the earth to be a plane, and that it is stationary, and also that it is some animate substance. They believe that below us are a succession of planes, and that inhabitants are dwelling upon them. The sun, moon, and some of the stars, they believe revolve around the earth; but some of the stars are stationary, and stuck upon the sky. They believe the sun is a hot substance; that the moon is inhabited by a man and a dog. As to the stars, they know nothing of their nature. They do not believe the planets to be other worlds. They say the white people came from the water, where they dwelt in ships.

48. They believe that God, or the Great Spirit, created the universe, and all things just as they exist.

49. They believe the sun to be a large body of heat, and that it revolves around the earth. Some believe it is a ball of fire. They do not comprehend the revolution of the earth around the sun. They suppose that the sun literally rises and sets. They think our present theory an invention of the white man, and that he is not sincere, when he says the earth moves around the sun.

50. They believe the sky to be a material mass of some kind, to which the stars are appended. They believe that it is of a half-circular form, but that its truncations do not touch the earth. They do not believe the sky to be circumscribed.

51. They account for eclipses by the big dog swallowing the sun; but they have no idea where the big dog comes from. They do not believe that intervening objects are the causes of the eclipses. The "dead-sun" is accounted for, from the fogs going up from the earth; and they suppose that this fog is created by the smoke of fire, and sometimes that it arises from the rivers.

52. They compute the year from the budding of the trees. The year they suppose consists of some indefinite number of moons. They have no astronomical knowledge of the length of the year. The Creeks generally have no definite knowledge on this subject.

53. They have no definite idea of the length of the summer or winter.

54. They have no cycle, or fixed or stated period, at the end of which they believe the world will come to a close. But they say it will be destroyed by fire; and when this period arrives, the earth will be filled with war; and a body of people will appear among the Indians, and they will be destroyed; and then the Great Spirit will destroy the earth, to keep others from getting possession of it. They do not believe that the Indian priests cause its renewal.

55. They have no name for the year but the two general divisions, *winter* and *summer*. They have no week. They consider all days alike. The month and week are divisions unknown to them generally. The day is not divided into hours, or any other sub-portion of time.

56. They have but the one general name for all the stars. They are not able to particularize.

57. They have nothing corresponding to the signs of the zodiac. They do not attach any importance or influence to the stars. The shooting stars, however, are exceptions; which they suppose to be excrements cast upon the earth, and this they mix with their medicine; and which, when thus prepared, they consider very efficacious. They do not believe that the moon has any influence upon men, plants, or animals. Corn is planted by the particular periods of the moon. There is nothing known of the moon influencing the growth of corn.

58. The Aurora Borealis, they suppose, indicates changes in the weather, and always for the worse. The milky-way, they believe to be the paths of the spirits; but the spirits of whom, or what, they do not know. They have no theory in regard to rain, hail, clouds, &c. They know nothing of meteors. Comets, they believe, indicate war, but of their nature they know nothing. The phenomena of falling stars they explain by the consideration that the falling body is efficacious in medicinal purposes. They cannot account for the rainbow; they believe it indicates fair weather.

59. There are coincidences among them similar to the oriental system of computing time. They have an annual "busk," which formerly embraced a period of eight days, but now a period of four days; this time is devoted to thanksgiving and fasting. It resembles very much the year of Jubilee among the Hebrews. At the return of this festival, all offences are cancelled. This festival commences at the ripening of the new crops, at which time a general purgation and cleansing takes place. At intervals, singing and dancing are introduced. On the first day of the "busketau," there is a general feast prepared, from the old crop, to which feast all contribute.

Attendance is obligatory. Sacred fires are built, upon which four pieces of green oak wood are arranged, in positions according to the four cardinal points of the compass. Their tales and allegories must be referred to, for information on this and like subjects.

60. They say their paradise, or happy hunting-grounds, is above; but where, they have no definite idea.

61. ARITHMETIC.—The tribe *does* count by decimals. None of the clans among the Creeks are in the habit of counting by fives. They can compute numbers as high as millions. Beyond ten, the digits are used in connection with the decimals; and this same method is used to any extent. They are carried on with certainty to a million.

62. Neither the wampum nor any form of sea-shells is used to represent numbers, or constitute a standard of exchange. The Creeks never had a currency, nor have they now anything of the nature of a currency, aside from the currency of the United States. The seawan, peag, or wampum, the Creeks never introduced into their computations, as auxiliaries to their digits and decimals. They do understand Federal money.

63. Previous to about the year 1800, there were no accounts to keep. They are now kept similar to those of the people of the United States. All valuable skins, muskrats, beavers, and otters, are sold by weight. The buffalo and deer-skins are sold by quality.

64. Signs or pictorial devices are not used to any extent in accounts, or in commerce, neither are their pictorial records.

65. Each perpendicular stroke always *did* stand for one, and each additional stroke marked an additional number. The ages of deceased persons or number of scalps taken by them, or war-parties which they have headed, are recorded on their grave-posts by this system of strokes. The sign of the cross represents ten. The dot, and comma, never stood as a sign for a day, or a moon, or a month, of a year. The chronological marks that were and are in present use, are a small number of sticks, made, generally, of cane. Another plan, sometimes in use, was to make small holes in a board, in which a peg was inserted, to keep the days of the week.

66. MEDICINE.—They use herbs and incantations in their general practice. They are careful and tender of their sick, as a general thing. There is no perceptible difference in their attention to the sick.

67. Their doctors and practitioners have no knowledge of anatomy; neither of the circulation of the blood; nor of the pathology of diseases.

68. TREATMENT OF COMPLAINTS.—For fevers, they use the red-root; for pleurisy, they use sassafras; for consumption, they have no definite treatment. For many complaints they have no herbs. The roots and herbs they were accustomed to use in the "*old nation*" they have not yet been able to discover in their new country, west of the Mississippi.

69. The big prairie-weed is used as an emetic, taken as a tea. For cathartics they have a number of roots and weeds, prepared as a tea. They dig their herbs and roots when needed.

70. They do not bleed in fevers. The Indian lancet is used in cases of pain. The cupping is generally efficacious: and a vacuum is produced by exhausting the air by the aid of the mouth.

71. They have no healing or drawing plasters; bandages and lints are applied in many cases.

72. The success with which they treat gun-shot wounds, cuts, &c., is generally attributed to the care of the physician.

73. The Creeks never amputate. They are skilful in the use of splints. For removing the wounded, they use the litter.

74. They use roots and herbs altogether. They have efficacious remedies for female complaints. They do not use, intelligently, metallic medicines. They do not understand the nature of an oxyde. They do not always use their compounds in such a manner as to insure efficacy and success.

75. They have two modes of treating eruptions of the skin: First, the external application of a decoction of herbs; and, Secondly, by steaming with the same decoction. The cause of their known and general failure to treat small-pox, or varioloid, is, First, their limited knowledge of the nature of the disease; and, Secondly, their belief that it is contagious prevents their administering for its cure. In no cases, whatever, do men assist in parturition. After parturition, they use a simple root or weed. For paralysis, their treatment is not, in all cases, successful, which is generally by roots or herbs. They use the vapor-bath efficaciously.

76. INTERNAL CONSTITUTION OF THE TRIBE.—The Creek nation is divided into two

districts; the Arkansas and the Canadian districts. The officers consist of a principal and a second chief, who are chosen by the general council; in addition, each district has two principal chiefs, chosen in the same manner as the two principal chiefs of the nation. Each district is governed by the same laws. Every hundred persons has a right to elect a chief, who represents them in general council. The tribe is divided into several clans, viz., *The Tiger, Wind, Bear, Wolf, Bird, Fox, Root, Alligator, Deer;* all denoting strength. The tribe appears, originally, to have been organized on the Totemic plan; each clan bearing the name of some bird or animal.

77. The only utility of the divisions into clans, appears to be, to denote those objects in which they take the greatest delight. They are indicative of the original families, and also distinguished chiefs of the tribe. Clans are a sign of kindred. The devices were not their names. There is pre-eminence given to the clans. The clans are not governed by distinct chiefs. (See above.)

78. The chiefs were not originally hereditary. The descent was in the female line. This custom has become extinct. The chiefs are now chosen by the council.

79. The general council of the Creek Indians consists of a representation from the whole tribe, as divided into towns. This council, composed of the chiefs, is vested with *plenary* power, to act for the whole tribe. Their *verbal summons* or decisions, have all the force of a written document; these decisions are announced in general council; and also recorded by the clerk. Their authority, (as among the principal chiefs,) is often assumed. Their authority is delegated to them, (in many cases,) by virtue of their standing and influence. They are at all times open to popular opinion, and are the mere exponents of it. The power of the chiefs in council is unlimited. Their decisions are absolute.

80. The principal chiefs are chosen by the general council; and now, are not chosen so much for their renowned deeds, as their civil and popular qualifications. Their term of office continues during good behavior. The disapproval of the body of the people is an effective bar to the exercise of their powers and functions.

81. The chiefs, in public council, speak the opinions and sentiments of the warriors. They consult the priests, old men, and young men composing the tribe, in local matters. Sometimes they are subject to be influenced by extraneous opinions. In many cases they pursue the interests of the people with shrewdness and intensity. In their councils, their decisions are generally determined by the opinions of the leading chiefs; their *dictum* generally influences the mass. The right to sit in council, is, nominally, equivalent to giving a *vote*. The *ayes* and *noes*, if counted,

would be by the clerk. Casting the vote, however, has not been introduced among the Creeks. The opinions of the leading chiefs generally regulate the decisions of the council. Powers are sometimes exercised by the chiefs, in advance of public opinion; but anything gross or outrageous would be indignantly repelled.

82. The public or general councils are opened with a good deal of ceremony. The principal chiefs first enter and take their seats. The next in order then enter, and addressing themselves to the whole body, ask: "Are you all present, my friends?" They then take their seats. The principal chief, rising from his seat, presents to the second chief, his tobacco; and this interchange takes place throughout the whole asssembly. These interchanges having been gone through with, they next speak about their domestic affairs. Then local matters; after which they proceed to business. Their business is conducted irregularly, daily, and generally, by the position of the sun. The principal chief adjourns the council to the appointed time next day. Before the close of their deliberations, the two bodies agree upon a day of adjournment. At the appointed time for adjournment, the two bodies come together. The second chiefs, rising first, address themselves to the first chiefs, telling them "they are going to leave them." They then seat themselves, the whole council following in regular order, according to their grade. The principal chiefs, then rising, say, "We return home." There is still some respect paid to ancient ceremonies. Regard is paid to the weather in their deliberations. They have two national clerks; and one United States, and one national interpreter. All questions are considered with more or less deliberation. Decisions are sometimes made upon the principle of majorities, and sometimes forced by the opinions of the leading chiefs. There are no cases that require absolute unanimity. There may be cases in which the voice of a leading chief might be taken as the will of the tribe.

83. Decisions made by the chiefs in council are carried into effect implicitly. In cases of capital punishment, the executioner is selected from a body of men called "the Light Horse." He uses neither tomahawk, club, nor arrow. The gun is generally selected as the instrument of execution. If the culprit has no choice of place for execution, the executioner may appoint the place, which is generally selected with reference to a convenience for burial. In case of the restoration of property, a messenger is sent to the parties. There is, however, no regularity on this subject.

84. In case of a vacancy by death or otherwise, the office is filled by the selection of the General Council. Sometimes the vacancy is filled by the town to which the chief belonged, and then brought before the General Council for sanction. In case of a vacancy among the leading chiefs, the vacancy is filled by the General Council. The chiefs may be deposed from office for gross outrage. The custom of wearing medals is

an ancient one, but is gradually growing into disuse. There are but few that wear them. The medals received from the United States are valued and preserved, but not worn.

85. The priesthood or physic-makers do not constitute a distinct power in the government. They do not sit in the council as a priesthood; and their advice in political matters is not resorted to. Sometimes, however, in local matters, their *conjurations* have influence. The weather, about the time of the distribution of the annuity, in some parts of the nation, falls under the scrutiny of the physic-makers. Among the Creeks there is no such thing as selling or ceding of lands. "*It is for me, for thee, and for all.*" Sometimes, however, improvements are disposed of.

86. The powers of a civil and a war chief are often united in the same person. The distinction between war chiefs and civil chiefs is scarcely known. There is a limit when a young man may express his opinion; this is at the age of twenty-one.

87. The matrons have no rights whatever in council. They have no separate seat in council. They have no prescriptive right of being heard by an official person, who bears the character of a messenger from the women. The widows of distinguished chiefs, or those of acknowledged wisdom, are never admitted to sit in council.

87. There is no definite understanding among the tribes in regard to this matter. The Creeks have a right to summon a general council of the tribes. These councils may be called for any purpose, and by any of the tribes. A general council of the tribes was held at Tallequah, Cherokee Nation, about the year 1843. Nothing of any importance was transacted at it. There is at present an effort being made to summon a general council of the tribes some time during the next summer.

89. Formerly the brother of the deceased avenged the murder; if there was no brother, then the nearest relative. Among the Creeks, now, however, the murderer undergoes a regular trial before some of the leading chiefs of the nation, and is dealt with according to their decision. If an Indian should murder a negro, the law is satisfied with the value of the negro being paid to the owner. The intervention of time and the fleeing of the murderer, generally allay resentment and lead to compromises. After the annual "busk," all offences are cancelled. There is no distinction made in the estimate of life between the male and female. Debts of licensed traders are sometimes brought before the council for adjudication. The chiefs generally have a sufficient knowledge of numbers to enable them to act with prudence. A message accompanied with wampum is never sent in case of private disputes or controversies among the tribes.

90. There are no game laws in existence among the Creeks. Families have no particular tracts as their exclusive hunting ground.

91. As to individual boundaries, there are none laid down. National boundaries are no barriers to the citizens of one nation settling in the limits of another. The hunting-grounds are not parcelled out to families.

92. Cases of local intrusion do not arise. Injury done to property is redressed by law. The forfeiture of life is not often the result of continued intrusion; and the seizure of furs still less.

93. Each hunting party makes its own regulations for the distribution of the game. The person who starts an animal and wounds it, is entitled to the skin. The meat is divided according to agreement. Each one bags his own game. In cases of thefts from traps, the offenders are punished by law.

94. The tribes permit each other to hunt on their respective limits. There is seldom any difficulty on this subject.

95. INDIAN TRADE.—*What are the principal facts necessary to be known, to regulate the Indian trade and commerce, and to preserve peaceful relations on the frontiers?* Commercial intercourse has, in some respects, promoted the general cause of Indian civilization. The traffic in furs and skins is reduced to a regular system of barter. The difficulties and risks attending it, are the dangers from bugs and worms. The general chances of profit and loss depend upon the state of the markets abroad. The annuity sent to the Indians by the United States Government, especially that part in the shape of goods, does not escape the ordeal of speculation, in the Indian Territory. The Indians, in a great many cases, sell their claims to these goods, to their own people engaged in trade among them, for about one-half their actual first cost. The consequence is, that when the goods arrive, those most in need of them have the sad satisfaction of seeing them pass into the hands of their own people engaged in speculation among them. The intercourse law forbids white people to embark in this speculation. This part of the intercourse law is generally evaded by the Indian taking into partnership with him the white man: thus dividing the turkey between them, while *the poor Indians*, for whom these things were intended, must content themselves with the buzzard.

96. The chiefs and hunters are shrewd, cautious, and exact in their dealings; and sometimes make their purchases with judgment; and, as a general thing, pay up their debts faithfully. Many are *sober, moral*, and *discreet*. Many, at the present time, do

not entirely rely upon memory in keeping their accounts. They are not aided by hieroglyphics of any kind. In keeping their accounts, they confide mostly to the honesty of the merchant. They are every year becoming more exact. The fidelity of the Creek Indian does not depend upon the hunting. The credits are freely renewed, but they are upon the faith of the annuity.

98. The tariff of exchanges, generally, is sufficient to protect the trader from loss. It is generally just and fair. Nothing definite can be stated in regard to *limitation—bad* or *lost.*

99. Commerce has, since the discovery of the continent, had the effect to stimulate the hunters to increased exertions, and thus to hasten the diminution of the races of animals whose furs are caught.

100. The different races of animals have declined rapidly, since the prosecution of the trade. The buffalo and beaver diminish in the highest ratio. Do not know which flee first.

101. The lands, when denuded of furs, are of no great value to the Indians, while they remain in the hunter-state. The sale of such hunted lands is not beneficial to them, but very detrimental. For, when debarred of their hunting-grounds, they turn their attention to agriculture. The sale of them is, then, in the highest degree injurious to the Indians, and should not, in cases where it can be avoided, be resorted to. The proceeds of the sales are a source of continued feuds among them; as among the Cherokees.

102. Not known.

103. The failure of the game, upon which many of the roving tribes depend almost exclusively for subsistence, will prove one of the most effectual causes to induce them to exchange their migratory for the more settled agricultural and mechanic life. It is a question, whether the goods furnished by the annuities have contributed to the industry, happiness, and comfort of the native Indian. Forty years ago, the Creeks were an industrious people; they spun considerable cloth, and also manufactured blankets. But now, they are departing from these good old habits of days gone-by, and are depending upon the importations of the merchants. Even the "bustle," an accompaniment of dress in civilized life, may occasionally be met with in the Creek nation.

104. The evil effects of the Indian trade have been, in too many instances, that the Indian has imbibed all the vices of the white man, while the good has been left

entirely out of view. Forty years ago, the Creeks were *moral, sober*, and *virtuous*. The traffic in ardent spirits has been a cause of undoubted injury, and, it is to be feared, of depopulation among the tribes. The introduction of gunpowder and fire-arms has contributed greatly to the rapid diminution of the game. Formerly, the game was sought after, exclusively, as a means of actual subsistence. Latterly, it is sought more for traffic. The introduction of fire-arms can scarcely be said to have exerted any decided influence in favor either of peace or war. The roving tribes understand very distinctly the deadly power of the rifle; and, whenever compelled to oppose the arrow against its dreaded effects, contend beyond rifle-shot; and only hope for success by taking some unforeseen advantage, such as during the intervals of loading, or a skirmish in the woods, where the trees form a convenient breastwork. The principal cause of discord on the frontiers is scarcely attributable to the introduction of fire-arms and their accompaniments. But, on the other hand, it has arisen from the introduction of ardent spirits and the transactions of unprincipled white men. Years ago, when the laws in regard to the introduction of ardent spirits were very lax, it was very little in use, compared with the present consumption. Moral sentiment among the Indians themselves, will do more to check the traffic and use of it, than the most stringent laws that can possibly be enacted. Industry will make them sober and happy. Introduce the mechanic arts, and a happy era will have commenced throughout the Indian territory. Introduce the apprenticeship system among them, and a benefit will have been conferred upon the Indian that will make him industrious and happy. The conclusion in regard to intemperance and the introduction of ardent spirits among the Indians, is this: *remedy the evil at home, and there will be no cause of complaint among our red brethren.*

105. Problem of Civilization.—Whatever doubts have existed, heretofore, in regard to the satisfactory solution of this question, they must now give way before the cheering results that have attended the philanthropic efforts that have from time to time been made, and are at present going on among the Cherokees, Choctaws, Chickasaws, and Creeks. These tribes yielded their country east of the Mississippi, rendered dear to them by the associations of youth, their traditions, and the graves of their fathers. They had learned the great truths of Christianity, and the arts of agriculture and civilized life; yet they gave up all, and sought a new home in the far-off wilderness, and have made in that wilderness fruitful and rich farms and flourishing villages. Some of their schools are of a high order. The gospel ministry is well attended. Some of their constitutions are purely republican. The people are increasing in numbers. Peace dwells within their limits, and plenteousness within their borders; civilization upon Christian principles; agriculture and the mechanic arts; and schools. With these primary and fundamental principles of human happiness, civilization among them is no longer problematical.

106. LEGISLATION OF CONGRESS. — The intercourse laws, as they exist, are, in the main, very good. The great difficulty is their not being carried into effect by those whose duty it is to administer them. It is scarcely practicable that *all* the difficulties that arise between the tribes can be provided for.

107. Difficulties and wars arise from local causes in many cases that are unforeseen. The negroes that were brought in, under General Jessup's Proclamation, during the Seminole war, threaten difficulty between the Creeks and Seminoles.

108. The faithful application of these laws would do a great deal to secure more effectually the rights or welfare of the Indian.

109. Any modification of the provisions respecting the payment or distribution of annuities that would place them in the hands of the Indians themselves, or prevent their annuities being bartered away, would be a charity and good work for the Indians. *Their treaty funds, if applied to small neighborhood schools, and the introduction of the mechanic arts by the apprenticeship system, would do a great deal for their comfort and civilization.*

110. Their present location requires the introduction of mills; and the mechanic arts that would enable them to live more comfortably.

111. The non-manufacture of ardent spirits at home would tend most effectually to shield the tribes from the introduction of it into their territories, and from the pressure of lawless or illicit traffic.

112. The tribes could be as well treated with in the forest as they could be at the seat of government. The expenses on the frontier, for subsistence, are heavy. An interview with the Executive Head of Government is beneficial; but Commissioners of the right stamp, sent among them, would be better, thus bringing the mass of the people into view with the Government.

113. It is seldom that emigrating bands abide for long periods on their territories. We have not heard complaints of such trespasses.

114. The Cherokees are sufficiently advanced to have their funds paid to a treasurer, to be kept by him, and disbursed by him, agreeably to the laws of their local legislature.

115. The payment of annuities, to separate heads of families, is most beneficial.

Under no circumstances whatever should the principal of an Indian fund be paid to the Indians. Very few are capable of the wise or prudent application of money.

116.—NEW INDIAN GOVERNMENTS WEST OF THE MISSISSIPPI.—The elective franchise is open for all who have reached the age of twenty-one years. Some of the tribes have written constitutions, which are decidedly of a republican character. This is peculiarly the case with the Cherokees and Choctaws. The Creeks are still without any permanent written constitution, but we believe the time is not far distant, when they will be prepared to be governed by one. The elections among the Creeks are by general council and towns. General officers are elected by the towns. The influence which some of the leading chiefs assume, without being questioned by the people, is the only point that wants guarding, to prevent the abuse of the elective franchise. There are no property qualifications necessary to the exercise of the elective franchise. The young men exercise this right at eighteen years of age. There are no rights surrendered as a boon or equivalent for the general security of life, liberty, and property.

117. The practical working of these governments, has been very beneficial. From time to time, modifications and changes and new laws are enacted, as the wants of the people seem to demand.

118.—*What is the present state, &c.?* These governments are as prosperous as reasonably could be expected, with every prospect of continuing so. Laws for the enforcement of public order have been adopted. Offences are tried, debts collected, by law. Clanships and sectional divisions are being amalgamated, and many of their superstitions are giving way.

119.—PROPERTY.—*What ideas have the Indians of Property?* They believe *private rights* accrued to them from the Great Spirit. From the earliest times, the Indians have professed very correct ideas of *private rights.* In war, all spoils taken from the enemy became the property of the individual captor; and the property thus acquired, as well as all other, descended in the female line. They have also very correct views of the *legal* ideas of property. Some believe that rights formerly came from war and hunting. Might, it is believed, has sometimes constituted right with the Indian. In the incursions of one tribe against another, the weaker retired from before the stronger: restitution was never given. They have always recognised the right to take every advantage of the enemy in battle.

120. Right was originally obtained by the first occupancy of the territory: and this right was considered valid, unless forfeited in war. They have no clear views on the remainder.

121. The descent of property is fixed. It is willed as the parents please. But if no will has been made, the property reverts to the children. But in case of marriage with a widow, with children, her property reverts to her children by her first husband. The eldest son is entitled only to an equal portion with the rest. A written will is binding. A verbal will, established by two responsible persons, is valid also. If there has been no other disposition made of the medal, it goes to the eldest son. In former times, all relics were taken possession of by the deceased sister's eldest son. But now they are the subject of legacy as other property.

122. Obligations, in regard to debt, are considered binding. Time does not diminish these obligations among the Creeks. The Indian does not consider ill-luck in hunting, as exonerating him from paying his debts. They are not prone to sink individuality, after a time, into nationality, and to seek to provide for them in that manner. The Creeks are punctual in the payment of their debts. They set a high value on real property, exacting for it its real worth, nor do they part with it readily, nor for inadequate sums. There have been instances of making more than one conveyance of property, but these cases do not often arise now.

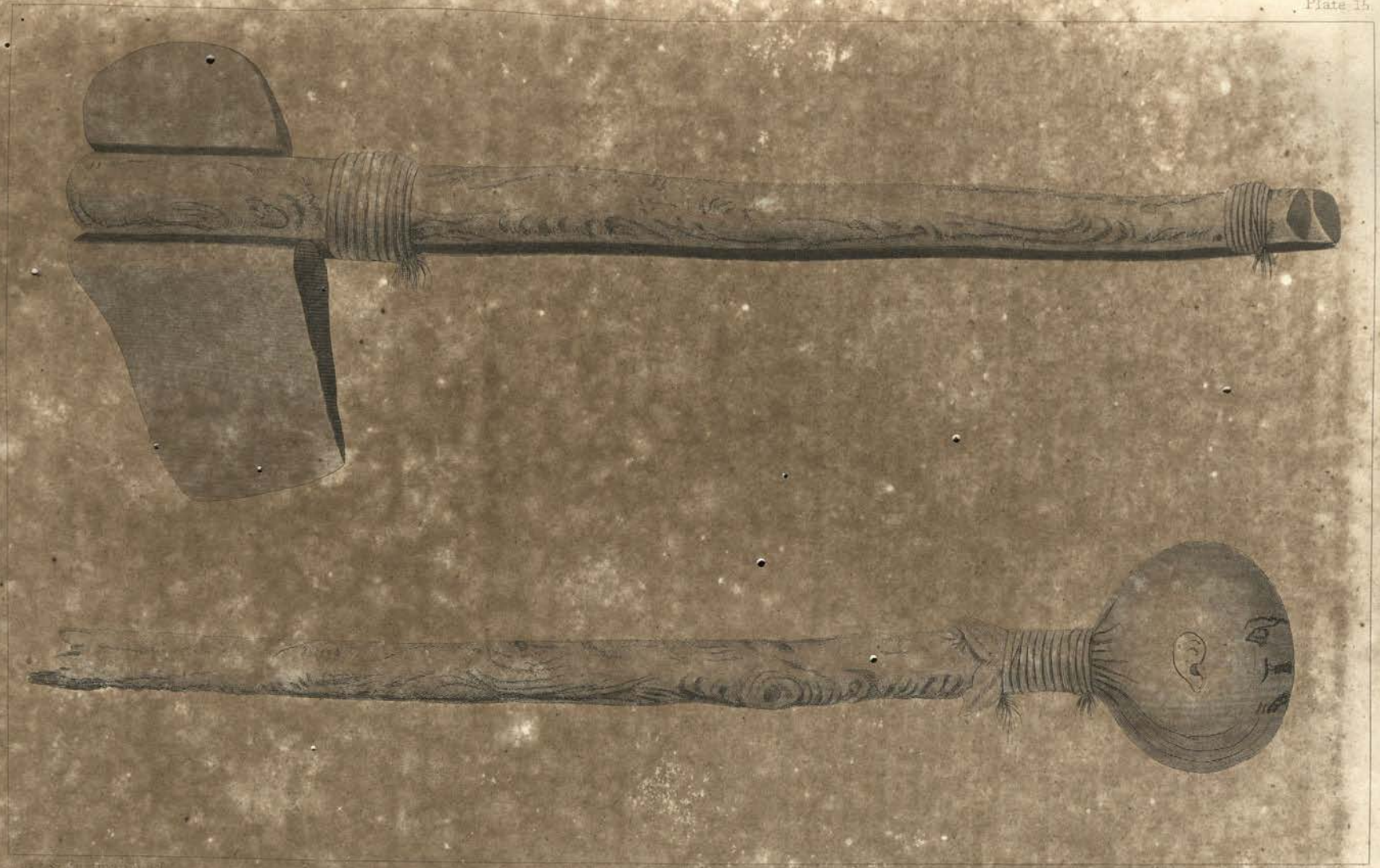
10. MASSACHUSETTS INDIANS.

When the English landed in Massachusetts, in 1620, there were some twenty tribes of Indians in the present area of New England, speaking cognate dialects. They were hunters and fishermen, in the lowest state of barbarism, and though they never had been, apparently, densely populous, the tribes had then recently suffered much, from a general epidemic. In their manners and customs, forest-arts and traditions, and in their language, they did not differ in their ethnological type. They made use, in their wars, of the balista, which is shown in Plate 15, Figure 2. This antique instrument is represented several times, agreeably to Chingwauk's interpretation, on the Dighton Rock.

The Rev. Cotton Mather, in the quaint language of the times, describes the Massachusetts Indians as follows:—

"Know, then, that these doleful creatures are the veriest ruins of mankind which are to be found anywhere upon the face of the earth. No such estates are to be expected among them as have been the baits which the pretended converters in other countries have snapped at. One might see among them what an hard master the devil is, to the most devoted of his vassals. These abject creatures live in a country full of mines; we have already made entrance upon our iron; and in the very surface of the ground among us, there lies copper enough to supply all this world; besides other mines hereafter to be exposed. But our shiftless Indians were never owners of so much as a knife, till we came among them. Their name for an Englishman was a *knife-man;* stone was used instead of metal for their tools; and for their coins, they have only little beads with holes in them to string them upon a bracelet, whereof some are white; and of these there go six for a penny. Some are black, or blue; and of these, go three for a penny. This wampum, as they call it, is made of the shell-fish, which lies upon the sea-coast continually.

"They live in a country where we now have all the conveniences of human life. But, as for them, their housing is nothing but a few mats tied about poles fastened in the earth, where a good fire is their bed-clothes in the coldest seasons. Their clothing is but a skin of a beast, covering their hind-parts, their fore-parts having but a little apron where nature calls for secrecy. Their diet has not a greater dainty than their *nokehick*, that is, a spoonful of their parched meal, with a spoonful of water, which will strengthen them to travel a day together; except we should mention the flesh of deers, bears, moose, raccoons, and the like, which they have when they can



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EXTRAND ZARISTA

catch them; as also a little fish, which, if they would preserve, 'twas by drying, not by salting, for they had not a grain of salt in the world, I think, till we bestowed it on them. Their physic is, excepting a few odd specifics, which some of them encounter certain cases with, nothing hardly, but an *hot-house*, or a *powow*. Their hot-house is a little cave, about eight feet over, where, after they have terribly heated it, a crew of them go sit and sweat and smoke for an hour together, and then immediately run into some very cold adjacent brook, without the least mischief to them. 'Tis this way they recover themselves from some diseases. But, in most of their dangerous distempers, 't is a powow that must be sent for; that is, a priest, who has more familiarity with Satan than his neighbors. This conjurer comes and roars, and howls, and uses magical ceremonies over the sick man, and will be well paid for it, when he has done; if this don't effect the cure, the man's time is come, and there's an end.

"They live in a country full of the best ship-timber under heaven, but never saw a ship till some came from Europe hither; and then they were scared out of their wits to see the monster come sailing in, and spitting fire, with a mighty noise, out of her floating side. They cross the water in canoes made, sometimes, of trees, which they burn and hew till they have hollowed them; and sometimes of barks, which they stitch into a light sort of a vessel, to be easily carried over land; if they over-set, it is but a little paddling like a dog, and they are soon where they were.

"Their way of living is infinitely barbarous; the men are most abominably slothful, making their poor squaws or wives to plant, and dress, and barn, and beat their corn, and build their wigwams for them; which, perhaps, may be the reason of their extraordinary ease in child-birth. In the mean time, their chief employment, when they 'l condescend unto any, is that of hunting; wherein they 'l go out some scores, if not hundreds of them, in a company, driving all before them.

"They 'l continue in a place till they have burnt up all the wood thereabouts, and then they pluck up stakes to follow the wood which they cannot fetch home unto themselves; hence, when they inquire about the English, 'Why come they hither?' they have, themselves, very learnedly determined the case, It was because we wanted firing. No arts are understood among them, unless just so far as to maintain their brutish conversation, which is little more than is to be found among the very beavers upon our streams.

"Their division of time is by sleeps, and moons, and winters; and, by lodging abroad, they have somewhat observed the motions of the stars; among which it has been surprising unto me to find, that they have always called Charles' Wain by the name of Paukunnawaw, or The Bear, which is the name whereby Europeans also have distinguished it. Moreover, they have little, if any, traditions among them worthy of our notice; and reading and writing is altogether unknown to them, though there is a rock or two in the country that has unaccountable characters engraved upon

it.[1] All the religion they have amounts unto thus much; they believe that there are many gods, who made and own the several nations of the world; of which a certain great god, in the south-west regions of heaven, bears the greatest figure. They believe that every remarkable creature has a peculiar god within it, or about it; there is with them a sun-god, or a moon-god, and the like; and they cannot conceive but that the fire must be a kind of god, inasmuch as a spark of it will soon produce very strange effects. They believe that when any good or ill happens to them, there is the favor or the anger of a god expressed in it; and hence, as in a time of calamity they keep a dance, or a day of extravagant ridiculous devotions to their god, so in a time of prosperity they likewise have a feast, wherein they also make presents one unto another. Finally, they believe that their chief god, Kamantowit, made a man and woman of a stone; which, upon dislike, he broke to pieces, and made another man and woman of a tree, which were the fountains of all mankind; and that we all have in us immortal souls, which, if we were godly, shall go to a splendid entertainment with Kamantowit, but, otherwise, must wander about in a restless horror for ever. But if you say to them anything of a resurrection, they will reply upon you, 'I shall never believe it!' And, when they have any weighty undertaking before them, 'tis an usual thing for them to have their assemblies, wherein, after the usage of some diabolical rites, a devil appears unto them, to inform them and advise them about their circumstances; and sometimes there are odd events of their making these applications to the devil: for instance, 'tis particularly affirmed that the Indians, in their wars with us, finding a sore inconvenience by our dogs, which would make a sad yelling if, in the night, they scented the approaches of them, they sacrificed a dog to the devil; after which no English dog would bark at an Indian for divers months ensuing. This was the miserable people which our Eliot propounded unto himself the saving of." (Life of Eliot.)

Eliot, who has been justly styled the Apostle of the Indians, came from England in 1631; and although charged with the duties of a pastor, and taking a prominent part in the ecclesiastical government of the New England churches, he turned his attention, at the same time, very strongly to the conversion of the tribes. To this end he engaged native teachers, and learned the Indian language. In this he made great proficiency, and soon began to preach to them in their vernacular. Co-laborers joined him; and by their efforts, native evangelists were raised up, under whose labors, superintended by Mr. Eliot, Indian churches were established at various points. Fifteen hundred souls were under religious instruction on Martha's Vineyard alone.

In 1661, Eliot published a translation of the entire Scriptures in their language. This work, which evinces vast labor and research, is seen to be a well-characterized

[1] See the Inscription of the Dighton Rock, under Antiquities.

dialect of the Algonquin. A vocabulary of it, extracted from this translation, is exhibited herewith. Many English terms for nouns and verbs are employed, with the usual Indian inflections. The words God and Jehovah, appear as synonyms of Manito, the Indian term for Deity. He found, it appears, no term for the verb *to love*, and introduced the word 'womon' as an equivalent, adding the ordinary Indian suffixes and inflexions, for person, number, and tense.

This translation of the Bible into the language, constitutes an era in American philology. It preceded, it is believed, any missionary effort of equal magnitude, in the way of translation, in India or any other part of the world; and it must for ever remain as a monument of New England zeal, and active labor in the conversion of the native tribes. The term Massachusetts language is applied to the various cognate and closely affiliated dialects of the tribes who formerly inhabited it. It constitutes a peculiar type of the Algonquin, which was spread widely along the Atlantic, and in the West.

It is interesting to observe the fate of this people, who were the object of so much benevolent care, after the passage of an epoch of little less than two centuries. The great blow to the permanent success of this work, was struck by the infuriated and general war, which broke out under the indomitable sachem called Metacom, better known as King Philip, who drew all but the Christian communities and the Mohegans into his scheme. Even these were often suspected. The cruelties which were committed during this war, produced the most bitter hatred and distrust between the parties. The whole race of Indians was suspected, and from the painful events of this unwise war, on the part of the natives, we must date the suspicious and unkind feelings which were so long prevalent, and which yet tincture the American mind.

In 1849 the legislature of Massachusetts directed inquiries to be made respecting them. From the report made on this occasion, there were found to be remnants of twelve tribes or local clans, who are living respectively at Chippequddic, Christiantown, Gay Head, Fall River, Marshpee, Herring Pond, Hassanamisco, Punkapog, Natic, Dudley, Grafton, and Yarmouth. Their number is estimated at 847, only about seven or eight of which are of pure blood; the remainder being a mixture of Indian and African. A plan for their improvement was exhibited. This plan embraces the following features: 1. The enactment of a uniform system of laws, to apply to every tribe in the State, in the spirit of modern philanthropy. 2. The merging of all, except those at Marshpee, Herring Pond, and Martha's Vineyard, into one community. 3. Granting to every one who wishes it, the privileges of citizenship, involving the liability to taxation. 4. The appointment of an Indian commissioner for their supervision and improvement.

Hard, indeed, it may seem to the proud spirit of Indian independence, which has so long showed itself in the lives of a Pontiac, a Buekanjahela, Tecumseh, Blackwarrior, and Red Jacket, if the means for their preservation must be deemed dependent, as we see in this movement, upon the corruption of their blood!

VOCABULARY.

1. SUBSTANTIVES.

Spiritual and Human Existence: Terms of Consanguinity: Names of Parts of the Human Frame.

1. God.....Manitoo. Gen. xxiv. 26.
2. Devil.....Mannitoosh. Job i. 7. Chepian. Life of Eliot, p. 97.
3. Angel.....English employed.
4. Man.....Wosketomp.
5. Woman.....Mittomwossis. Gen. xxiv. 8. Job xxi. 9.
6. Boy.....Mukkutchouks. Job iii. 5.
7. Girl, or maid.....Nunksqua. Gen. xvi. 24. Luke viii. 54. Ps. clviii. 12.
8. Virgin[1].....Penomp. Gen. xxiv. 16. Job xxxiii. 4. Isa. vii. 14. Mat. i. 23.
9. Infant, or child.....Mukkie. Gen. xxv. 22. Job xxxiii. 25.
10. Father, my.....Noosh. Gen. xxii. 7. Luke x. 21.
11. Mother.....Nokas. Song of Sol. iii. 4.
12. Husband.....Munumayenok. Gen. xxx. 15.
13. Wife.....Nunaumonittumwos. Job xxxi. 10.
14. Son.....Nunaumon. Gen. xxiv. 6.
15. Daughter.....Nuttanis. Mat. ix. 22.
16. Brother.....Nemetat. Song of Sol. xiii. 1.
17. Sister.....Nummissis. Netompas. Song of Sol. iv. 9.
18. An Indian.
19. A white man.
20. Head.....Uppuhkuk. Mark xiv. 3. Song of Sol. v. 2.
21. Hair.....Meesunk. Lev. xi. 41. Ps. lxix. 4. Mat. x. 30.
22. Face.....Wuskesuk. Prov. xxvii. 20, xxx. 10.
23. Scalp.....Qanonuhque. Ps. lxviii. 21.
24. Ear.....Mehtauog. Job xxix. 11. Plu. in *og*.
25. Eye.....Wuskesuk. Job xxviii. 10.
26. Nose.....Mutchan. Job iii. 21. Isa. xxxvii. 29.
27. Mouth.....Uttoon. Job xxix. 9, xxxiii. 2, xl. 4.
28. Tongue.....Weenau. Job xli. 1. Prov. x. 20.
29. Tooth.....Weepit. Job xxix. 17.
30. Beard.....Weeshittooun. Lev. xiii. 30. Isa. vii. 20.
31. Neck.....Kussittspuk. Song of Sol. iv. 4. Isa. xlvii. 4.
32. Arm.....Kuppitanit. Song of Sol. vii. 6.

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[1] It must be evident, that if there be no equivalent for this word as contradistinguished from No. 7, there can be no translation of Mat. i. 18, and the parallel passages of Luke, &c., which will convey to the Indian mind the doctrine of the mystery of the incarnation.

33. Shoulder.....Wuttukeit. Isa. xi. 4, 6.
34. Back .....Uppusq. Isa. l. 6. Uppusqantoônk. Prov. xxvi. 3.
35. Hand.....Nutcheg. Job ii. 5.
36. Finger.....Muhpuhkukquaitch. Dan. v. 5.
37. Nail.....Wuhkoss. Dan. iv. 33. Wuhkas. Deut. xxi. 12.
38. Breast.....Wohpannog. Lev. vii. 30.
39. Body .....Nuhog. Luke xx. 19. Mark xiv. 22. My in N.
40. Leg.....Wuhkont. Song of Sol. v. 15. Plu. in *ash*. Prov. xxvi. 7.
41. Navel.....Wenwe. Song of Sol. vii. 2.
42. Thigh.....Wehquaosh. Dan. ii. 32.
43. Knee .....Mukkuttog. Job iv. 4. Plu. in *og*.
44. Foot.....Wuseet. Rev. x. 2.
45. Toe .....Ketuhquasit. Lev. xiv. 25.
46. Heel.....Wogquan. Jer. xiii. 22. Plu. in *ash*. Gen. iii. 15, xxv. 26.
47. Bone .....Kon. Job xxx. 30, xxxi. 22.
48. Heart.....Uttah. Job xxxi. 7. Metah. Prov. xxvii. 23.
49. Liver .....Wusquenit. Lev. iii. 4, ix. 19. Wusqun. Prov. vii. 23.
50. Windpipe.
51. Stomach .....Wunnokus. Job xxx. 27. Song of Sol. v. 14.
52. Bladder .....Wishq.
53. Blood.....Musque. Acts ii. 19. Wusqueheonk. Lev. vii. 26.
54. Vein .....Kutcheht. Isa.
55. Sinew.....Kutcheht. Isa.
56. Flesh .....Weyaus. Gen. xxvii. 3. Job xxiii. 21, 25, xxxiv. 15.
57. Skin.....Natuhquab. Job xxx. 30. My in N.
58. Seat.....Posketteau. Isa. xx. 4. Buttocks.
59. Ankle.

WAR, HUNTING, AND TRAVELLING.

60. Town.....Otan. Josh. viii. 8.
61. House.....Wekit. Job i. 13.
62. Door.....Squantam. Job xxx. 9.
63. Lodge .....Wunneepogquhkomukqut. Lev. xxiii. 42.
64. Chief.....Ketassoot. Luke xxiii. 38. Song of Sol. iii. 9, 11.
65. Warrior.....Aummenuhkesuenomoh. Dan. iii. 20.
66. Friend.....Netomp. Luke xi. 5, 6.
67. Enemy.....Matwamo. Psalms lxxiii. 21. Matwoh. Prov. xxvii. 6.
68. Kettle.....Ohkeék. Job xli. 20.
69. Arrow.....Kôhquodt. Job xli. 26, 28. Isa. v. 28. I. Sam. xx. 20.
70. Bow.....Ahtompeh. II. Sam. i. 18.
71. War-club.
72. Spear.....Qunuhtug. Job xli. 26, 29.

73. Axe.....Togkuok. I. Kings vi. 7.
74. Gun.[1]
75. Knife.....Quogwosh. Josh. v. 2.
76. Flint.....Qussukquanit. Isa. v. 28.
77. Boat.....Noonshoonun. Acts xvii. 16.
78. Ship.....Kuhtoonagqut. Mark. iv. 36. Acts xx. 38. Prov. xxx. 19.
79. Sail.....Omoquash. Acts xvii. 17.
80. Mast.....Sehoghonganuhtugquot. xxiii. 24.
81. Oar.....Hunkaueehteang. Ezek. xxvii. 6.
82. Paddle.....Wuttuhunk. Deut. xxiii. 13.

COSTUME AND DECORATIONS.

83. Shoe.....Mukussin. Luke x. 4.
84. Legging.....Metas. Dan. iii. 21. Plu. in *ash*.
85. Coat.....Hogkooôngash. Lev. viii. 7. Mark. vi. 9.
86. Shirt.
87. Breechcloth.....Ampauish. Isa. xx. 2.
88. Sash.....Uppetukquobpis. Isa. xi. 5.
89. Head-dress.....Wunasohquabesu. II. Kings ix. 30.
90. Pipe.
91. Wampum.
92. Tobacco.
93. Shot-pouch.

ASTRONOMICAL AND METEOROLOGICAL PHENOMENA.

94. Sky.....Kesukqut. Rev. iv. 2.
95. Heaven.....Kesukquash. Gen. i. 8, 9. Josh. x. 13.
96. Sun.....Nepauz. Josh. x. 12.
97. Moon.....Nanepauz. Josh. x. 12, 13.
98. Star.....Anogqs. Job xxvi. 5. Gen. i. 16. Plu. in *og*.
99. Day.....Kesukod. Gen. i. 5. Josh. x. 13. Job i. 13.
100. Night.....Nukon. Gen. i. 5. Tibukód. Isa. xxi. 11.
101. Light.....Wequai. Gen. i. 3. Habbakuk iii. 4. Isa. v. 20.
102. Darkness.....Pohkenum. Gen. i. 2. Isa. v. 20. Ex. x. 21.
103. Morning.....Metompog. Gen. i. 5. Isa. xiv. 12.
104. Evening.....Wanunkwook. Zeph. ii. 7. Gen. i. 5, 8, 13, 19, 23.

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[1] Here, and in most other cases where a blank occurs, there is no corresponding term to be found in the Bible.

105. Mid-day.
106. Midnight .....Nouttipukok. Acts xvi. 25. Ex. xi. 4.
107. Early.....Nomponeu. John xx. 1.
108. Late.....Mannuchish. Isa. xliv. 6.
109. Spring .....Sontippog. Mark xiii. 28.
110. Summer.....Sequane. Prov. xxvi. 1. Nepun. Gen. viii. 22. Prov. vi. 8.
111. Autumn.
112. Winter.....Popon. Song of Sol. ii. 2.
113. Year .....Kodtumog. I. Sam. xxvii. 7, xxix. 3. Isa. xxix. 1.
114. Wind .....Waban. Isa. xvii. 13.
115. Lightning .....Ukkutshaumun. Ex. xix. 16, xx. 10. Dan. x. 6.
116. Thunder.....Pahtuhquohan. Ex. xix. 16, xx. 18.
117. Rain .....Sokanon. Job xxix. 23.
118. Snow .....Koon. Job xxvi. 1, vi. 16.
119. Hail.....Kussegin. Rev. xi, 19.

GEOGRAPHICAL TERMS.

120. Fire .....Nootae. Isa. ix. 5.
121. Water.....Nippe. Prov. xxii. 19.
122. Ice .....Kuppâd. Job vi. 16.
123. Earth.....Ohke. Job xxxviii. 4.
124. Sea.....Kehtahhanit. Prov. xxx. 19.
125. Lake .....Nepissepag. Luke viii. 23, 33.
126. River .....Sepu. Job xxvii. 10. Seip. Gen. ii. 10.
127. Spring .....Tohkekom. Song of Sol. iv. 12, 15.
128. Stream.
129. Valley .....Ooneuhkoi. Josh. viii. 11, x. 12.
130. Hill .....Wudchuemes. Isa. xli. 2.
131. Mountain .....Wudchue. Job xxxix. 8.
132. Plain.
133. Forest .....Mehtugquehkontu. xliv. 14.
134. Meadow.....Moquashqut. Gen. xix. 17.
135. Bog .....Neppissipagwash. Isa. xiv. 23.
136. Island.....Menohhannet. Isa. xli. 1, 2.

METALS AND THE MINERAL KINGDOM.

137. Stone.....Qussuk. Prov. xxvii. 3.
138. Rock .....Qussuk.

139. Silver.
140. Copper.
141. Iron .....Missechuag. Prov. xxvii. 17.
142. Lead.....Ma Muttattag. Zach. v. 7, 8. Mahmuttattag.
143. Gold.

HORTICULTURE AND AGRICULTURE.

144. Maize, or corn.
145. Wheat.
146. Oats.
147. Potatoe.
148. Turnip.
149. Pea.
150. Rye.
151. Bean.
152. Melon.....Monaskootasquąsh. Lev. xi. 5.
153. Squash.
154. Barley.

BOTANICAL TERMS AND VEGETABLE KINGDOM.

155. Tree.....Mehtug. Job xl. 21, 22, xv. 7.
156. Log.....Uhtukq.
157. Limb.....Wuttuk. Zach. vi. 12. Isa. x. 39.
158. Wood.....Uhtugquæ. Song of Sol. iii. 9.
159. Post.....Nepattunkquon. Isa. vi. 4. Post of a door.
160. Stump .....Wequąnunk. Dan. iv. 15, 23, 26.
161. Pine.....Qunonuhqua. Isa. xiv. 8. Fir-tree.
162. Oak .....Nootimes. Isa. vi. 13, i. 30, xliv. 14.
163. Ash .....Monunksoh. Isa. xliv. 14.
164. Elm.
165. Basswood.
166. Shrub.
167. Leaf.....Oneep. Isa. i. 30.
168. Bark.
169. Grass.....Moskehtu. Gen. i. Prov. xxii. 25. Ex. vi. 10.
170. Hay.....Moskehtu. Isa. xlii. 4.
171. Nettle.....Koussuk. Isa. v. 6. Briĕr.
172. Thistle .....Taskookau.
173. Weed.
174. Flower .....Peshaun. Song of Sol. ii. 12.
175. Rose.....Peshaun.
176. Lily.....Peshaun. Luke xx. 27. Mat. vi. 38.

GENERAL ARTICLES OF FOOD.

177. Bread.....Petukquannuk. Job xxxiii. 20. Lev. xxiv. 5. Eccl. xi. 1.
178. Indian-meal.....Nokehick. Eliot's Life, p. 79, ed. of 1691.
179. Flour.....Nookkik. I. Sam. xxviii. 24.
180. Meat.....Weyaus. Meetsuonk. Job xxxiv. 3.
181. Fat.....Wees. Lev. iii. 3.

NATIVE QUADRUPEDS.

182. Beaver.
183. Deer.....Ahtuh. Song of Sol. ii. 9.
184. Bison, or Buffalo.
185. Bear.....Mosq. Prov. xvii. 12.
186. Elk.
187. Moose.
188. Otter.
189. Fox.....Wonkussiss. Song of Sol. ii. 15. Dim. in *emes*. Plu. in *og*.
190. Wolf.....Mukquooshim. Isa. xlv. 25. Query—plu. in *im*.
191. Dog.....Anum. I. Sam. ix. 8.
192. Squirrel.
193. Hare.....Ogkeshku. Prov. xxx. 26. Coney.
194. Lynx.
195. Panther.
196. Muskrat.....Mishahpohquas. Isa. lxvi. 17. Mouse. Lev. xi. 29.
197. Mink.
198. Fisher.
199. Martin.
200. Mole.....Mameechomit. Lev. xi. 30.
201. Polecat.

DOMESTIC ANIMALS INTRODUCED AT THE DISCOVERY.[1]

202. Hog.
203. Horse.
204. Cow.
205. Sheep.

[1] Translations of these names are requested.

REPTILA, INSECTS, ETC.

206. Turtle, or Tortoise .....Toonuppas. Lev. xi. 29. Plu. in *og.*
207. Toad .....Tinnogkooqus. Ex. viii. 2. Plu. in *og.*
208. Snake .....Askook. Job xxvi. 13. Eccl. x. 2.
209. Lizard.
210. Worm .....Oohqua. Isa. xiv. 11. Plu. in *og.*
211. Insect .....Monitös. Plu. in *ug.*
212. Fly .....Ochaas.
213. Wasp .....Amo. Plu. in *og.*
214. Ant .....Aununnekqs. Prov. xxx. 25, vi. 6.

BIRDS, AND ORNITHOLOGY GENERALLY.

215. Bird.....Psukses. Job xli. 5. Prov. xxvii. 8.
216. Egg .....Woou. Job vi. 6. Woan. Isa. x. 14. Deut. xx. 6.
217. Feather .....Unnokon.
218. Claw .....Ookossa. Isa. v. 28. Dan. iv. 23.
219. Beak.
220. Wing .....Nuppohwun. Isa. vi. 2.
221. Goose.
222. Duck.
223. Swan .....Wequash. Lev. xi. 18.
224. Partridge.....Pohpohkussu. P. Sam. xxvi. 20.
225. Pigeon .....Nunneem. Lev. xv. 6.
226. Plover.
227. Woodcock.
228. Turkey.
229. Crow.....Weenont. Lev. xi. 15.
230. Raven.....Konkontu. Job xxxviii. 41. Song of Sol. v. 1. Gen. viii. 7.
231. Robin.
232. Eagle.....Wompisik. Lev. xi. 13. Isa. xl. 31.
233. Hawk.....Quanon. Lev. xi. 16.
234. Snipe.
235. Owl .....Kookookhau. Job xxx. 29. Isa. xiii. 21.
236. Woodpecker.

FISHES AND OBJECTS IN ICHTHYOLOGY.

237. Fish .....Namohs. Hab. i. 14. Luke xi. 11. Mat. xxxiv. 4.
238. Trout.

239. Bass.
240. Sturgeon.
241. Sunfish.
242. Pike.
243. Catfish.
244. Perch.
245. Sucker.
246. Minnow.
247. Fin.....Wapwekaneg. Lev. xi. 10. Plu. in *ig.*
248. Scale.....Wohhokgieg. Lev. xi. 10. Plu. in *ig.*
249. Roe.

2. ADJECTIVES.

In the Algonquin group of languages, the adjective is furnished with a *transitive* inflection, to denote the *class* of the object, of the *quality* of which it is intended to speak; and these transitive forms are the simplest, in which all words denoting the properties and qualities of bodies are orally found to exist. In that language, the two classes of objects which impose rules of construction upon the speaker, in the use of adjectives, are those *possessing* and those *wanting life* or *vitality*. The adjective roots or primitive forms of the adjective, are therefore always incumbered with a transitive inflection, to make certain to the hearer the precise class of objects spoken of. Thus, *waub* is the root-form of white. *Ish* or *ishk*, is a declarative particle, but if it be intended to describe a *white person*, the particle *izzie* is added; if a *white inanimate substance*, the particle is changed to *au*. Denote whether this mode or any analogous one exists in the language of which you furnish a vocabulary.

250. White.....Wompi. Mat v. 36.
251. Black.....Mooi. Song of Sol. i. 5.
252. Red.....Musqua. Isa. lxviii. 7.
253. Green.....Ashkoshqui. Song of Sol. v. 16.
254. Blue.....Oonôag. Ex. xxxix. 1, 2.
255. Yellow.....Wesôag. Ps. lxviii. 13.
256. Great.....Missi. Luke x. 2.
257. Small.....Peasi. II. Sam. xii. 8. Hag. i. 9.
258. Strong.....Menuhkesu. II. Sam. iii. 1. John ii. 14.
259. Weak.....Noochumwis. II. Sam. iii. 1. Isa. xvi. 10.
260. Old.....Kutchis. Isa. xx. 4.
261. Young.....Wuske. Rev. v. 4. Lev. xxii. 20. Isa. vii. 21.
262. Good.....Wunnegen. Isa. v. 20. Gen. i. 4.
263. Bad.....Matchet. Isa. v. 20.
264. Handsome.....Noonet. Song of Sol. i. 14.
265. Ugly.
266. Alive.....Pamotog. Luke xxiv. 5.
267. Dead.....Nuppuk. Luke xxiv. 5.
268. Life.....Pemoantooônk. Isa. xliii. 4. Sub. in *onk.*

269. Death.....Nuppoônk. Prov. vii. 27. Sub. in *onk*.
270. Cold .....Kussopeu. Rev. iii. 15.
271. Cold.....Sonquesea. Rev. iii. 15.
272. Sour .....Seog. Prov. x. 26.
273. Sweet.....Weekon. Eccl. xi. 7. Isa. v. 20.
274. Pepper.
275. Salt.
276. Bitter.....Wesogk. Rev. x. 10. Isa. v. 10.

In giving these examples, the substantive forms, Nos. 268, 269, and 274, 275, are given in immediate connection with the adjective, for obvious reasons.

3. PRONOUNS, PERSONAL AND RELATIVE.

The genius of the Indian language, to which reference has been above made, which requires that adjectives should have a transitive inflection, also imposes a similar rule of transition on the pronouns, which are perpetually required to show whether the class of objects to which they apply be *animate* or *inanimate*. It is the succedaneum for gender; and there is, as a consequence of so general a principle having been taken, no concord required in that class of languages, to denote the *masculine* and *feminine*. State whether the personal, relative, or demonstrative pronouns, be transitive or intransitive.

277. I.....Nen. Job xxxiv. 33.
278. Thou .....Ken. Josh. x. 12.
279. He .....W.
280. She .....W.
281. They.
282. Ye .....Keneau. Luke xxii. 20.
283. We, including the person addressed.
284. We, excluding " " Nenawun. Isa. xvi. 10.
285. { This person, or animate being. / This object or thing (inanimate). } Yeuoh. Mat. xxi. 10, 11.
286. { That person or animated being. / That object or thing (inanimate). }
287. { These persons or animated beings. / These objects or things (inanimate). }
288. { Those persons or animated beings. / Those objects or things. }
289. All.....Wame. Mark xiv. 29.
290. Part.
291. Who .....Howan. Mat. xxi. 10. Luke viii. 45, 46.
292. { What. / What person. / What thing. }

293. { Which person.
Which thing.

4. ADVERBS.

294. Near.....Pasoo. Mark xiii. 28, 29.
295. Far off.....Noondtit. Isa. xlvi. 13, xlix. 1.
296. To-day.....Keshukuk. II. Kings xxviii. 6.
297. To-morrow.....Mohtompog. I. Sam. xxxi. 8. Saup. Ex. viii. 10.
298. Yesterday.
299. By and by.
300. Yes.....Nux. Mat. xvii. 25.
301. No.....Matta. John. vii. 12. Mat. v. 37.
302. Perhaps.
303. Never.
304. For ever.....Mitcheme. Isa. xxvi. 4, xxxiv. 10. Mat. vi, 13.

5. PREPOSITIONS AND PREPOSITIONAL TERMS.

305. Above.....Waabe. Isa. vi. 2.
306. Under.
307. Within.
308. Without.
309. Something—*n.*
310. Nothing—*n*.....Matteag. Luke xxii. 35. Isa. xl. 17.
311. On.....Ohta. Lev. viii. 30.
312. In.
313. By.
314. Through.
315. In the sky.
316. On the tree.
317. In the house.
318. By the shore.
319. Through the water.

6. VERBS.

The simplest form of the Indian verb which has been found orally to exist in the languages examined, is the third person singular, present tense, of the indicative mood. The infinitive is only to be established by dissection. If this rule prevails in the language known to you, the equivalents of the verbs to eat, to drink, &c., will be understood to mean, *he* eats, *he* drinks, &c., unless it be otherwise denoted.

320. To eat.....Meetch. Job xxxi. 8. Mark viii. 2, 8.
321. To drink.....Wuttat. Isa. v. 22.
322. To laugh.....Haha. Eccl. 18, 12.

323. To cry .....Mauoo. Luke viii. 52. Eccl. iii. 4.
324. To love .....Womon. Song of Sol. ii. 9.
325. To burn .....Chikosw. Lev. iv. 12.
326. To walk.....Papaum. Zach. vi. 7.
327. To run .....Kenoos. Zach. ii. 4.
328. To see .....Naush. Rev. vi. 3.
329. To hear .....Noota. Luke viii. 8. Gen. iii. 8.
330. To speak .....Noowa. Zach. ii. 4.
331. To strike .....Nuttogkom. Jer. xxi. 6.
332. To think .....Mehquontam. Isa. xlii. 18.
333. To wish.
334. To call.....Wehkom. Isa. lv. 5, 6.
335. To live.....Kuppamantam. Isa. xliii. 4.
336. To go.....Monchek. I. Sam. xxix. 10.
337. To sing .....Nukketoo. Isa. v. 1.
338. To dance .....Pumukom. Eccl. iii. 6.
339. To die.....Nuppoo. Gen. xxv. 8.
340. To tie.....Upponam. Ex. xxxix. 31.
341. To kill .....Neshehteam. Eccl. iii. 3.
342. To embark.

PARTICIPLES. (1.)

343. Eating.
344. Drinking.
345. Laughing.
346. Crying.

SUBSTANTIVE-VERB. (2.)

347. To be, or to exist.
348. You are.
349. He is.
350. I am that I am.....Nen Nuttinnien Nen Nuttinnien. Ex. iii. 14.

(1.) Analogy and examples denote that there are no elementary participles in the aboriginal tongues, but that the sense of the equivalents generally returned, is, he (is) eating (is) drinking, &c.

(2.) Conjugations are effected in the Indian languages, by tensal inflections of the pronouns and verbs. The entire absence of auxiliary verbs in the languages was observed at an early period. The Indian who is constantly in the habit of saying, I sick—I well—I glad—I sorry—was naturally supposed to speak a language, which, however rich in its inflections and power of description, had no word or radical particle to denote abstract existence. Such does not, however, appear to be the case in the Algonquin, from a scrutiny of some of the Scripture translations which have been received, and a comparison with their vocabularies. But the subject still requires examination. So

far as can be judged, the term for abstract existence is of very limited use, and never, in any case, appears to be employed to express *passion, emotion, suffering*, or *enjoyment.* In this view, the forms No. 348, 349, are added. It is apprehended that no precise equivalent for 350 — the test phrase proposed by Mr. Duponceau for the verb — can be given. In the Algonquin, however, the phrase *Nin dow iau Iaun* has been rendered literally, I—(the[1]) body—I am. The whole question turning upon the primary meaning of the root-form IAU or IAH.[2]

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[1] As there is no indefinite article in the language, the [inclusive] term here is merely inferential.

[2] The almost exact identity of the sound of this word with the Hebrew verb To Be, הָיָה has not escaped notice.

11. FORMER INDIAN POPULATION OF KENTUCKY.

It is known that, while the present area of Kentucky was, at the earliest times, the theatre of severe Indian conflicts, stratagems, and bloody battles, these efforts of fierce contending warriors were made by tribes, who, during all the historical period of our information, crossed the Ohio from the West. The fierce Shawnee and wily Delaware remained in the country but for short times. They landed at secret points, as hunters and warriors, and had no permanent residence within its boundaries. Such were the incessant bloody attacks and depredations made by these and their kindred tribes, both prior and subsequent to the American revolution. The history of that State was, indeed, bathed in blood, and sealed with the deaths of some of the noblest and freest of men.

At an early day, the head of the Kentucky River became a favorite and important point of embarkation for Indians moving, in predatory or hunting bands, from the South to the North and West. The Shawnees, after their great defeat by the Cherokees, took that route, and this people always considered themselves to have claims to these attractive hunting-grounds, where the deer, the elk, buffalo, and bear abounded —claims, indeed, whose only foundation was blood and plunder.

The history of these events is rife with the highest degree of interest, but cannot here be entered on. The following letter, from one of the early settlers of the country, is given as showing the common tradition, that, while the area of Kentucky was perpetually fought for, as a cherished part of the Indian hunting-ground, it was not, in fact, permanently occupied by any tribe. The writer's (Mr. Joseph Ficklin's) attention was but incidentally called to the subject. His letter, which is in answer to a copy of our pamphlet of printed inquiries, bears date at Lexington, 31st of August, 1847.

"I have opened your circular addressed to Dr. Jarvis, agreeably to your request, and beg leave to remark that I have myself an acquaintance with the Indian history of this State from the year 1781, and that nothing is known here connected with your inquiries, save the remains of early settlements too remote to allow of any evidence of the character of the population, except that it must have been nearly similar to that of the greater portion which once occupied the rest of the States of the Union.

There is one fact favorable to this State, which belongs to few, if any, of the sister States. We have not to answer, to any tribunal, for the crime of driving off the

Indian tribes, and possessing their lands. There were no Indians located within our limits, on our taking possession of this country. A discontented portion of the Shawnee tribe, from Virginia, broke off from the nation, which removed to the Scioto country, in Ohio, about the year 1730, and formed a town, known by the name of Lulbegrud, in what is now Clark County, about 30 miles east of this place. This tribe left this country about 1750, and went to East Tennessee, to the Cherokee nation. Soon after, they returned to Ohio, and joined the rest of the nation, after spending a few years on the Ohio River, giving name to Shawnee-town in the State of Illinois, a place of some note at this time. This information is founded on the account of the Indians at the first settlement of this State, and since confirmed by *Black-hoof*, a native of Lulbegrud, who visited this country in 1816, and went on the spot, describing the water-streams and hills in a manner to satisfy every body that he was acquainted with the place.

"I claim no credit for this State in escaping the odium of driving off the savages, because I hold that no people have any claim to a *whole* country for a hunting or robbing residence, on the score of living, for a brief period, on a small part of it. Our right to Northern Mexico, California, and Texas, is preferable to any other nation, for the simple reason, that we alone subdue the savages and robbers, and place it under a position which was intended by the Creator of the world, as explained to the father of our race."

12. MENOMONIE AND CHIPPEWA HISTORY.

BY GEORGE JOHNSTON.

THE Chippewas and Menomonies are known to us by many traditions and incidents of deep interest, which will be in due time submitted.

The originality of the following tradition is of a character which can be viewed disjunctively, and commends itself to notice. The Indian is prone to trace important events in his history to small, and apparently improbable causes. We have heard of no Indian wars of any note, of an ancient date, but those against the Foxes, in which the Menomonies figure as one of the chief actors. Their connection with the Algonquin family, and their speaking a peculiar dialect of it, lead to the supposition that they were, at an ancient period, more closely affiliated. Traditions of this kind, however mixed up with improbabilities, may enable us hereafter better to comprehend their history. That they fell out with their neighbors, relatives, and friends, for a small thing, is an event by no means novel or improbable. — H. R. S.

TRADITION.

LONG before the white men had set foot upon the Indian soil, or made any discovery of this continent, a bloody and most cruel war took place, and the existing present warfare between the Sioux and Chippewas, originated at this early period. At the mouth of the Menomonie River, there existed an extensive Menomonie town, governed by a head chief (name unknown) of great power and influence, who had the control of the river at its outlet. There existed also four Chippewa towns upon the river, in the interior portions of the country, governed by a chief whose fame and renown were well known. This Chippewa chief married the Menomonie chief's sister. The two tribes lived happily together as relatives and allies, until the Chippewa chief's son had attained the age of manhood, and at this period the Menomonie chief gave directions that the river should be stopped at its mouth, in order to prevent the fish, and particularly the sturgeon, from ascending it. This high-handed measure caused a famine among the Chippewas, who inhabited the interior portions of the country upon the river.

The Chippewa chief was informed that his brother-in-law, the Menomonie chief, had directed that the river should be barred up at its outlet, in order to prevent the fish ascending the river, and thereby causing the existing famine among the Chippewas. Upon the information received, the Chippewa chief held a smoking council with his tribe, and gave directions to his son to visit forthwith his uncle, the Menomonie chief, and request him to throw open the river, in order to allow the fish to ascend, and thereby stop the existing famine. In the mean time, the Menomonie chief heard that his nephew was preparing to visit him, and the chief immediately gave directions to have a small bone taken from the inner part of the moose's fore-leg, which was made pointed and sharpened. The Chippewa youth, in obedience to his father's commands, proceeded on his voyage to visit his uncle, the Menomonie chief, and, upon his arriving in the Menomonie town, proceeded to call upon him, and besought him, in a respectful manner, to throw open his river to relieve their brethren and starving children. "Very well," replied the haughty Menomonie chief; "you have come, my nephew, to request me to throw open my river, alleging that your people are in a starving state. All I can do for you, my nephew, is this;" and taking the sharpened bone with his right hand, and with his left hand seizing his nephew's hair upon the crown of the head, passed the bone through the skin, between it and the skull, and letting go of his hold, the sharpened bone remained crosswise upon the youth's head. "Now," said the chief, "this is what I can do, conformably with your request."

The young Chippewa withdrew himself from his uncle's presence, without making any comments upon the reception he had met with, and immediately proceeded on his way homewards, encamping several nights, and avoiding the different villages, finally reached his father's village, with his head covered, and on entering his father's lodge, he laid himself down without saying a word, or uncovering his head. The heralds soon proclaimed this fact throughout the village. On the following morning the young man broke silence, and called for his father's messengers, and ordered them to cut and mix a sufficient quantity of tobacco for the whole tribe. When the tobacco was prepared, he was informed that it was ready, and he forthwith directed that the elders and all the braves and warriors should be sent for, and when all were assembled, the young man got up and uncovered his head, and showed to the assembled multitude the condition he was in, and the bone still sticking upon the crown of his head, and his face and head much inflamed. He related to them the reception he had met with from his uncle; and then addressing himself to his father, said to him, "that he must not on this occasion say a word of dissuasion, for it would be of no avail." He then addressed the tribe, and told them that he was shamefully treated, and that they must prepare their war-clubs, and be in readiness to start on the following morning. The consent was unanimous, the war-party was formed, and on the following morning they took their departure. The young man was on this occasion the leader and war-chief. On reaching the Menomonie town, strict orders were given to take the

principal Menomonie chief alive, and to destroy all who resisted. This order was fully obeyed and put in execution, for every living soul in the town met with their fate from an exasperated foe: the Menomonie chief excepted, and who had been overpowered by many, and now bound with leather thongs, and without hopes of escape. The young Chippewa war-leader then ordered young men to catch, on the shoals of the barred-up river, small sturgeon of various sizes. One was selected of the size of a carp, and the bound Menomonie chief was then accosted by his nephew, reminded that he had caused the outlet of the river to be barred up, causing a grievous famine among the Indians who inhabited the interior portions of the country, and for that outrage, and the penurious love he bore for the sturgeon, so he would be permitted to keep and cherish THAT fish. The young man then gave orders to push in the chief's fundament a small sturgeon of the size above referred to, and he was then allowed, when unfettered, to reflect upon his folly and to seek his tribe. The barred-up river was thrown open, and soon relief reached the famished Chippewas. This was the commencement of a war to be replete with murders and cruelties unparalleled in Indian history.

The Menomonie tribe then passed their wampum belts and war-pipe to the following tribes, and formed an alliance with them. Sacs and Foxes were engaged in this warfare against the Chippewas, together with the Pottawatamies, Kickapoos, Winnabagoes, Sioux, Opanangoes, Shawnees, Algonquins, Nautowas, and Wabanakees. Fortunately the Chippewas had three mighty and valorous warriors, of great power, at the Sault Ste. Marie. The principal leader was Nabanois, of the crane totem, the principal and great chief at La Pointe, of the tribe of Ah-ah-wai, (whose name is unknown at this period,) and the great chief and war-leader of Nipigon, of the tribe of the king-fisher, or Kish-kemanisee. The latter chief pushed his warfare east, among many tribes, and finally reached the Atlantic coast, in pursuit of his enemies. His hieroglyphics have been discovered on one of the islands in Boston Bay;[1] the same also exist on Lake Superior, near the Yellow-Dog River, and also upon the north coast, near Gargantwois. This chief pursued his enemies with unrelenting fury, during summer and winter, and maintained and kept possession of the Chippewa country. One of their great war paths was Tahquahminong and Manistic Rivers, and from Chocolate River into the Shoshquonabi, and another from the L'ance Kewywenon and down the Menomonie River."

[1] This may possibly be an allusion to the inscription on the Dighton Rock.

13. NOTICE OF THE MISCOTINS AND ASSIGUNAIGS, TWO EXTINCT TRIBES, WHO PRECEDED THE ALGONQUINS IN THE OCCUPANCY OF THE LAKE BASINS.

Among the traditions which float in the minds of the Algonquin tribes who occupy the shores of the upper Lakes, are the names of the two now unknown tribes which are mentioned above. Over these they recite triumphs, in a long continued war. The residence of the Miscotins is identified with vestiges of human labor and residence at several points on the shores of Lakes Huron and Michigan. They are represented as having been driven south into the general area of the present States of Illinois and Wisconsin.

What relates to these allusions, may be stated as follows:

Fishing vessels of the leading maritime nations of Europe, appeared on the banks of Newfoundland in the early part of the 16th century. Denis commanded one of these, in 1506, and Aubert in 1508. Cartier, who coasted along the rugged and barren shores of Newfoundland, the "Heluiland" of the Scandinavians, in 1534, having discovered the gulf and river St. Lawrence, ascended the latter, the following year, to Lake St. Peters, in one of his ships, whence he proceeded, in boats, to the island of *Hochelaga*, the present site of Montreal. He found a large and populous town of Indians at this place, who, it is perceived from his short vocabulary, were of the Iroquois stock. These were subsequently found to be the ancient tribe known to us as Wyandots, whom the French, as Charlevoix tells us, named Hurons, from the wild manner of dressing their hair. The Indians, probably mistaking a generic for a specific question, and Cartier a specific for a generic reply, supposed they called the country "Canada," when the word evidently only meant that part of it included in the *town*. These Indians occupied also the eastern and southern shores of the St. Lawrence, extending westward to Niagara and south-east to Lake Champlain, and were thus in juxtaposition to the other Iroquois Cantons. They were expert canoemen; they descended the St. Lawrence during the fishing seasons, to the Gulf. In the improved map of the North American Coast, published at Amsterdam in 1654, the country around Lake Champlain is called "Irocosia," which denoted the exclusiveness of the occupancy of the country east of the St. Lawrence and west of the Sorel, by that people at the date of the Dutch settlements.

On the opposite or north shores of the St. Lawrence the French found a people speaking a different language, who were, however, on terms with the Wyandots, and whom Colden, following the early French authors, represents as excelling the Iroquois in military skill and renown. This northern people traced their origin to the high and mountainous tract of lakes and cliffs which stretches from the sources of the Utawas river quite to the entrance of the Saguenay, at Tadousac. They are referred to by the early French writers as *Montagnes*. They early came to be known, however, in popular language, by the terms *Algomeequin*[1] and its contraction *Algonquin*. This term has never been explained. The inflection *win*, in *that* language, gives a substantive form to verbs.[2] Agomag and Agomeeg[3] are terms denoting *along, on, at, shore*, agreeably to the position of the speaker, and in this case meant the north shore. The plural inflections *ag* and *eeg*, giving the term a personal form, impart a meaning which may be rendered *people of the opposite shores*. Thus it was only a descriptive term, without denoting nationality.

The Algonquins extended up the Utawas, and from its sources south, west, and north, spreading through the entire area of the Upper Lakes. It is not known when they first reached these lakes. After their defeat in the St. Lawrence valley, by the Iroquois, they abandoned that valley, and joined their kindred west. History finds them, early in the 16th century, seated about the shores of Lakes Huron, Michigan, and Superior. Their traditions state that they had reached these lakes *from the east*. They were divided into numerous local bands bearing, generally, some local name, but differing in scarcely any appreciable degree (except in those minute tribal peculiarities known only to themselves) in language, looks, manners, or customs. At the earliest dates remembered in their traditions, the Attawas, or Ottawas, occupied the St. Lawrence, and afterwards the chain of the Manatouline islands of Lake Huron. This lake was early called, and is still known to the Algonquins as, Ottawa Lake. The tribe of the Missisagies[4] lived first at the river of that name, on the north shore of that lake, between *La Cloche* and Point Tessalon. We find them, in 1653, on the shores of Lake Ontario, between Genesee and Niagara rivers.[5]

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[1] Are we to understand this phrase as being derived from ice, *miquom*, or Beaver, *Amik?*

[2] Thus, *neme* is the infinitive to dance, *Neme-win*, a dance; *Ke-ge-do*, to speak; *Ke-ge-do-win*, a speaker.

[3] The germ-word here, which is sometimes *goma* and sometimes *gome*, means water, — it is the element denoting sea, great lake, bay, arm of the sea, &c., in compounds. *Ag* and *eg* are plural inflections animate, and, when thus employed in inanimate nouns, render the subject noble. The grammatical rule, in the Algonquin, is, that all nouns ending in a vowel are rendered plural, in the inanimate, by the letter *n*, and in the animate, by *g*.

[4] The term consists of an English plural in *s* added to the Algonquin phrase for a wide-mouthed river. There is, therefore, no notice of nationality, a word which must be exclusively sought in the language. Their language is pure Algonquin.

[5] Edifiantes.

The Nipercineans, who are deemed the true Algonquins by ancient writers, lived at Lake Nepissing; the Odjibwas on the straits of St. Mary's and on the shores of Lake Superior.

Ottawa and Chippewa tradition represents these tribes at first as coming into hostile collision, as a nation, with a people who appear to have been their predecessors in the lakes. This collision we first hear of on the inner shores of the island of Portagunasee,[1] and on the narrow peninsula of Point Detour, Lake Huron, the latter being the western cape of the entrance into the straits of St. Mary's. They fought and defeated them at three several places, and drove them west. To this primitive people, who appeared to rule in the region about Michillimackinac, they gave the name of Mushkodains, or Little Prairie Indians. Chusco, an aged Ottowa of Michillimackinac, invariably used the word in its *diminutive* and *plural* forms, namely, Mush-ko-dains-ug; that is to say, *People of the Little Prairie.* He spoke of them as the people whom the Algonquins drove off, and he invariably referred to them when questioned about ancient bones and caves, in the region of Michillimackinac. They had magicians for their leaders. Their war-captain escaped, the tradition says, under-ground, in the battle at Point Detour. They fled on this occasion up the coast to Michillimackinac, and so, by degrees, into Lake Michigan by its eastern shores, whence their traditions follow them as far south as the Washtenong, called Grand River by the French. These Mushkodains they represent as powerful and subtle, and excelling themselves in arts and necromancy.[2] They deposited the human bones, he said, found in caves at Michillimackinac. They are the authors of the trenches filled with human bones on Menissing or Round Island, in Lake Huron. The Ottawas attribute to them the small mounds and the old garden-beds in Grand River Valley, and at other places, and, in short, they point to them for whatever in the antiquities of the country they cannot explain or account for. Who these Little Prairie, or Fire Indians were, is uncertain. Are we not to regard them as the lost *Mascotins* of the early French writers? Were they not cotemporary in the Lakes, with the Assigunaigs, or Bone Indians, spoken of by the western and Lake tribes?

No reasonable doubt can exist on this subject. They are names ever in the foreground of Algonquin history, and these people appear to have fought for the possession of the Lake country. By them the ancient ossuaries were probably constructed; and we have considered the facts in vain if they were not the nations who worked the ancient copper-mines on Lake Superior. They appear to have passed south by the present sites of Grand River and Chicago.

The similarity of the ground form of the names for "prairie" and fire may have

[1] Latterly known as Drummond Island.

[2] My informer was a jossakeed, and laid much stress on the superiority which the art of necromancy imparted.

led to confusion in the minds of writers. Mushcoosi is grass or herbage in general. Ishkoda means fire. The only difference in the root form is that between Ushko and Ishko.

Algonquin tradition, as given by the Ottowa chief, Ke-wa-goosh-kum, in 1821, represents the separation of the Chippewas, Ottawas, and Potawatomies to have taken place in the vicinity of Michillimackinac. Chusco, the jossakeed, who died in 1838, makes the Ottawas, with a very pardonable vanity, to have been the most valiant tribe in the war against the Prairians or Muskoda men. Ishqua-gonabi, chief of the Chippewas on Grand Traverse Bay, and a man knowing traditions, denotes the war against muskoda men or dwellers on Little Prairie or Plains, to have been carried on by the Chippewas and Ottawas, and in this manner he accounts for the fact that villages of Chippewas and Ottawas alternate at this day on the eastern shores of Lake Michigan.[1] Ossigunac, an Ottawa chief of note of Penetauguishine, says that the Ottawas went at first to live among the men called the Potawatomies, about the southern shores or head of Lake Michigan; but the latter used bad medicine, and when complained of for their necromancy, they told the Ottawas they might go back towards the north if they did not like them.[2] They had made a fire for themselves.[3] This is the sum of what I have been able to glean about the predecessors of the *Algonquins* of the Lakes.

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[1] Travels in the central portions of the Mississippi Valley.

[2] MSS. Journal of Notes and Researches at Michillimackinac and Detroit, between the years 1833 and 1838.

[3] The word Potawatomies means makers of fire,—a symbolic phrase, by which is meant, they who assume separate sovereignty by building a council-fire for themselves.

14. ORIGIN, HISTORY, AND CONDITION OF THE CHICKASAWS.

THE following tradition respecting the origin and history of this branch of the Appalachian family, is transmitted by their agent from the present location of the tribe, west of the Mississippi River. It has been obtained from the most authentic sources. The allegory of the dog and pole probably reveals the faith of this people in an ancient prophet, or seer, under whose guidance they migrated. The story of their old men, as it is now told, runs thus:

By tradition, they say they came from the West; a part of their tribe remained in the West. When about to start eastward, they were provided with a large dog as a guard, and a pole as guide; the dog would give them notice whenever an enemy was near at hand, and thus enable them to make their arrangements to receive them. The pole they would plant in the ground every night, and the next morning they would look at it, and go in the direction it leaned. They continued their journey in this way until they crossed the great Mississippi River; and, on the waters of the Alabama River, arrived in the country about where Huntsville, Alabama, now is: there the pole was unsettled for several days; but, finally, it settled, and pointed in a southwest direction. They then started on that course, planting the pole every night, until they got to what is called the Chickasaw Old Fields, where the pole stood perfectly erect. All then came to the conclusion that that was the Promised Land, and there they accordingly remained until they emigrated west of the State of Arkansas, in the years 1837 and '38.

While the pole was in an unsettled situation, a part of their tribe moved on East, and got with the Creek Indians, but so soon as the majority of the tribe settled at the OLD FIELDS, they sent for the party that had gone on East, who answered that they were very tired, and would rest where they were a while. This clan was called Cush-eh-tah. They have never joined the parent tribe, but they always remained as friends until they had intercourse with the whites: then they became a separate nation.

The great dog was lost in the Mississippi, and they always believed that the dog had got into a large sink-hole, and there remained; the Chickasaws said they could hear the dog howl just before the evening came. Whenever any of their warriors get

scalps, they give them to the boys to go and throw them into the sink where the dog was. After throwing the scalps, the boys would run off in great fright, and if one should fall, in running off, the Chickasaws were certain he would be killed or taken prisoner by their enemies. Some of the half-breeds, and nearly all of the full-bloods, now believe it.

In travelling from the west to the east, they have no recollection of crossing any large water-course except the Mississippi River. When they were travelling from the West to the Promised Land in the East, they had enemies on all sides, and had to fight their way through, but they cannot give the names of the people they fought with while travelling.

They were informed, when they left the West, that they might look for whites; that they would come from the East; and they were to be on their guard, and to avoid the whites, lest they should bring all manner of vice among them.

They say that they believe in a Great Spirit, that they were created by him, but they do not believe in any punishment after death; they believe that the spirit will leave the body as soon as they die, and that it will assume the shape of the body, and move about among the Chickasaws in great joy. When one of the Chickasaws dies, they put the finest clothing they have on him; also all their jewelry, beads, &c.: this, they say, is to make a good appearance so soon as they die. The sick are frequently dressed before they die. They believe that the spirits of all the Chickasaws will go back to Mississippi, and join the spirits of those that have died there: and then all the spirits will return to the west before the world is destroyed by fire. They say that the world was once destroyed by water; that the water covered all the earth; that some made rafts to save themselves; but something like large white beavers would cut the strings off the raft and drown them. They say that one family was saved, and two of all kinds of animals. They say when, (or before,) the world will be destroyed by fire, it will rain down blood and oil.

When they are sick, they send for a doctor, (they have several among them,) after looking at the sick a-while, the family leave him and the sick alone. He then commences singing and shaking a gourd over the patient. This is done, not to cure, but to find out what is the matter or disease: as the doctor sings several songs, he watches closely the patient, and finds out which song pleased: then he determines what the disease is: he then uses herbs, roots, steaming, and conjuring: the doctor frequently recommends to have a large feast: (which they call *Tonsh-pa-shoo-phah*;) if the Indian is tolerably well off, and is sick for two or three weeks, they may have two or three Tonsh-pa-shoo-phahs. They eat, dance, and sing at a great rate, at these feasts; the doctors say that it raises the spirits of the sick, and weakens the evil spirit. Their traditions say that the white people are the favorites of the Great Spirit, that he taught them to communicate with each other without talking; that no matter how far they are apart, they can make each other understand; that he also

taught the whites how to live without hunting; and he instructed them to make each thing they want: but he only taught the Indians how to hunt; and that they had to get their living by hunting or perish: and the white people have no right to hunt. They say they got the first corn just after the flood; that a raven flew over them and dropped a part of an ear of corn, and they were told to plant it by the Great Spirit, and it grew up; that they worked in the soil around it with their fingers. They never had any kind of metallic tools; that when they wanted logs or poles a certain length, they had to burn them; that they made heads for their arrows out of a white kind of flint-rock. They say that it has not been more than a hundred years since they saw cattle, horses, and hogs.

After their settlement in Mississippi, they had several wars, all defensive; they fought with the Choctaws, and came off victorious: with the Creeks, and killed several hundred of them, and drove them off; they fought the Cherokees, Kickapoos, Osages, and several other tribes of Indians; all of whom they whipped.

A large number of French landed once at the Chickasaw Bluff, where Memphis (Tennessee) is now, and made an attack on the Chickasaws, and were driven off with great loss. At one time a large body of Creeks came to the Chickasaw country to kill them all off, and take their country. The Chickasaws knew of their approach, and built a fort, assisted by Captain David Smith and forty-five Tennesseans. The Creeks came, and but few returned to the Creek Nation to tell the sad tale.

The government of the Chickasaws, until they moved to the west of the Mississippi, had a king, whom they called *Minko*, and there is a clan or family by that name, that the king is taken from. The king is hereditary through the female side. They then had chiefs out of different families or clans.

The highest clan next to Minko is the *Sho-wa*. The next chief to the king is out of their clan. The next is *Co-ish-to*, second chief out of this clan. The next is *Oush-peh-ne*. The next is *Min-ne;* and the lowest clan is called *Hus-co-na*. Runners and waiters are taken from this family. When the chiefs thought it necessary to hold a council, they went to the king, and requested him to call a council. He would then send one of his runners out to inform the people that a council would be held at such a time and place. When they convened, the king would take his seat. The runners then placed each chief in his proper place. All the talking and business was done by the chiefs. If they passed a law, they informed the king of it. If he consented to it, it was a law; if he refused, the chiefs could make it a law if every chief was in favor of it. If one chief refused to give his consent, the law was lost.

The large mounds that are in Mississippi, the Indians have no idea of; they do not know whether they are natural or artificial. They were there when they first got to the country. They are called by the Chickasaws, navels. They thought that the Mississippi was the centre of the earth, and those mounds were as the navel of a man in the centre of his body.

So far the tradition. Their present state is this. In their agreement with the Choctaws west of the Mississippi, when they purchased an interest in the country, they agreed to come under the present Choctaw laws, which are a republican form of government. They elect a chief every four years; captains, every two years. The judges are elected by the general council. The Choctaws have nothing to do with the money affairs of the Chickasaws, nor the Chickasaws with those of the Choctaws. All appropriations made for any purpose by the Chickasaws, are made by the chiefs and captains in a council. Under the new government, they have improved more in the last five years, than they had done for the previous twenty years.

They have now under-way a large manual-labor academy, and have passed an act to establish two more, one male and the other female.

The Chickasaw district, (the country that all the Chickasaws should live in,) is well adapted to all their wants, and is large enough for two such tribes. It lies north of Red River. It is about 225 miles in length, and 150 miles in breadth. All of the False Washita River is in their district; a part of Blue Boggy, and Canadian Rivers, are in it also.

The funds of the Chickasaws, in the hands of the Government, for lands ceded to the United States, are ample for the purposes of educating every member of the tribe, and of making the most liberal provision for their advancement in agriculture and the arts. Possessing the fee of a fertile and well-watered territorial area of 33,750 square miles, over which they are guaranteed in the sovereignty, with an enlightened chieftaincy, a practical representative and elective system, and a people recognising the value of labor, it would be difficult to imagine a condition of things more favorable to their rapid progress in all the elements of civilization, self-government, and permanent prosperity.

VI. INTELLECTUAL CAPACITY AND CHARACTER OF THE INDIAN RACE. A.

VI. INTELLECTUAL CAPACITY AND CHARACTER OF THE INDIAN RACE.

A. Mythology and Oral Traditions.
B. Indian Pictography.

Of the topics which may be employed to denote the mental character and capacities of the aborigines, the principles of their languages — the style of their oratory — the oral imaginative lodge lore which they possess — and their mode of communicating ideas by the use of symbolic and representative devices, are the most prominent. The two latter have been selected on the present occasion. One reason for this choice is the little information we have heretofore had on the subjects. From a very early age, the Indian of North America has been observed to be a man possessing a flexible and imaginative mythology; to be prone to indulge in theories of cosmogony, in which the want of a true knowledge of the Deity, and a history of much pretensions to consistency, has often been ingeniously supplied by oral relations of the acts of spiritual beings, which constitute a new species of literary machinery, and who supply an outlet for the exhibition of wild poetic feelings, and fantastic theories of the acts and doings of spirits, giants, dwarfs, monsters and men. Another very striking mode of setting forth these beliefs, and exhibiting this miraculous agency, exists in the reflex influence of the curious devices which they have, from the discovery, been found to draw, in a rude way, on scrolls of bark, trees, rocks, and various substances, and which they denominate Ke-ké-win. Both the tales and the drawings illustrate their modes of thought on life, death, and a future state, and are eminently characteristic traits.

A. ABORIGINAL MYTHOLOGY AND ORAL TRADITIONS.

1. Iroquois Cosmogony.
2. Allegorical Traditions of the Origin of Men;—of the God Manabozho;—and of the introduction of Medical Magic.
3. Allegory of the Origin and History of the Osages.
4. Potawatomie Theology.
5. The Island of the Blessed, or the Hunter's Dream.
6. The fate of the Red-Headed Magician.
7. The Magic Circle in the Prairie.
8. The History of the Little Orphan who wears the White Feather.

In directing attention to the intellectual character, capacities, and idiosyncrasies of the aboriginal race—a subject respecting which they have been perhaps severely judged, some few traits of their mythology, and an extended examination of their peculiar mode of symbolic writing, or pictography, are introduced.

It is known that the Indian allegory presents an attractive field of fictitious inquiry. Their oral traditions of gods and monsters, spirits and genii, make a prominent display in the winter arcanum of the wigwam. Some of their allegories are beautifully sustained. And where, as in their miscellaneous legends and traditions, there is much that is incongruous and ridiculous, there is still evidence of no little variety of intellectual invention.

1. Iroquois Cosmogony.

The tribes who compose this group of the aborigines, concur in locating the beginning of creative power in the upper regions of space. Neo, or the Great Spirit of Life, is placed there. Atahocan is the master of heaven. Tarenyawagon, who is thought to be the same as Michabou, Chiabo, Manabozho, and the Great Hare, is called the keeper of the Heavens. Agreskoe[1] is the god of war. Atahentsic is the woman of heaven. The beginning of the creation, or of man, is connected with her history. One of the six of the original number of created men of heaven, was enamoured of her immediately after seeing her. Atahocan, having discovered this

[1] Charlevoix sees a Greek root, as the origin of the word Agreskoe.

amour, cast her out headlong to the earth. She was received below on the back of a great turtle lying on the waters, and was there delivered of twins. One of them was Inigorio, or the Good Mind; the other Anti-inigorio, or the Bad Mind. The good and the evil principles were thus introduced into the world. Both were equally active, but the latter perpetually employed himself in counteracting the acts of the former.

The tortoise expanded more and more, and finally became the earth. Atahentsic afterwards had a daughter, who bore two sons, YOS-KE-KA and THO-IT-SA-RON. YOS-KE-KA in the end killed his brother, and afterwards, Atahentsic, his grand-mother, resigned the government of the world to him.

The Iroquois affirm that Atahentsic is the same as the moon, and YOS-KE-KA, the same as the sun.

These things are elements of the earliest and best authenticated relations. They appear to denote a mixture of some of the dogmas of Zoroaster, as the ancient sun-worship, with the idolatry, perhaps, of the "Queen of Heaven."

2. ALLEGORICAL TRADITIONS OF THE ORIGIN OF MEN—OF MANABOZHO, AND OF THE INTRODUCTION OF THE RELIGIOUS MYSTERIES OF THE MEDICAL MAGIC.

At a certain time, a great Manito came on earth, and took a wife of men. She had four sons at a birth, and died in ushering them into the world. The first was Manabozho, who is the friend of the human race. The second Chibiabos, who has the care of the dead, and presides over the country of souls. The third Wabasso, who, as soon as he saw light, fled to the North, where he was changed into a white rabbit, and, under that form, is considered as a great spirit. The fourth was Chokanipok, or the man of flint, or the fire-stone.

The first thing Manabozho did, when he grew up, was to go to war against Chokanipok, whom he accused of his mother's death. The contests between them were frightful and long continued, and wherever they had a combat the face of nature still shows signs of it. Fragments were cut from his flesh, which were transformed into stones, and he finally destroyed Chokanipok by tearing out his entrails, which were changed into vines. All the flint-stones which are scattered over the earth were produced in this way, and they supplied men with the principle of fire.

Manabozho was the author of arts and improvements. He taught men how to make agákwuts,[1] lances, and arrow-points, and all implements of bone and stone, and also how to make snares, and traps, and nets, to take animals, and birds, and fishes. He and his brother Chibiabas lived retired, and were very intimate, planning things for the good of men, and were of superior and surpassing powers of mind and body.

The Manitos who live in the air, the earth, and the water, became jealous of their

[1] Axes.

great power, and conspired against them. Manabozho had warned his brother against their machinations, and cautioned him not to separate himself from his side; but one day Chibiabos ventured alone on one of the Great Lakes. It was winter, and the whole surface was covered with ice. As soon as he had reached the centre the malicious Manitos broke the ice, and plunged him to the bottom, where they hid his body.

Manabozho wailed along the shores. He waged a war against all the Manitos, and precipitated numbers of them to the deepest abyss. He called on the dead body of his brother. He put the whole country in dread by his lamentations. He then besmeared his face with black, and sat down six years to lament, uttering the name of Chibiabos. The Manitos consulted what to do to appease his melancholy and his wrath. The oldest and wisest of them, who had had no hand in the death of Chibiabos, offered to undertake the task of reconciliation. They built a sacred lodge close to that of Manabozho, and prepared a sumptuous feast. They procured the most delicious tobacco, and filled a pipe. They then assembled in order, one behind the other, and each carrying under his arm a sack formed of the skin of some favorite animal, as a beaver, an otter, or a lynx, and filled with precious and curious medicines, culled from all plants. These they exhibited, and invited him to the feast with pleasing words and ceremonies. He immediately raised his head, uncovered it, and washed off his mourning colors and besmearments, and then followed them. When they had reached the lodge, they offered him a cup of liquor prepared from the choicest medicines, as, at once, a propitiation, and an initiative rite. He drank it at a single draught. He found his melancholy departed, and felt the most inspiring effects. They then commenced their dances and songs, united with various ceremonies. Some shook their bags at him as a token of skill. Some exhibited the skins of birds filled with smaller birds, which, by some art, would hop out of the throat of the bag. Others showed curious tricks with their drums. All danced, all sang, all acted with the utmost gravity, and earnestness of gestures; but with exactness of time, motion, and voice. Manabozho was cured; he ate, danced, sung, and smoked the sacred pipe. In this manner the mysteries of the Grand Medicine Dance were introduced.

The before recreant Manitoes now all united their powers, to bring Chibiabos to life. They did so, and brought him to life, but it was forbidden him to enter the lodge. They gave him, through a chink, a burning coal, and told him to go and preside over the country of souls, and reign over the land of the dead. They bid him with the coal to kindle a fire for his aunts and uncles, a term by which is meant all men who should die thereafter, and make them happy, and let it be an everlasting fire.

Manabozho went to the Great Spirit after these things. He then descended to the earth, and confirmed the mysteries of the medicine-dance, and supplied all whom he initiated with medicines for the cure of all diseases. It is to him that we owe the growth of all the medical roots, and antidotes to every disease and poison. He com-

mits the growth of these to Misukumigakwa, or the mother of the earth, to whom he makes offerings.

Manabozho traverses the whole earth. He is the friend of man. He killed the ancient monsters whose bones we now see under the earth; and cleared the streams and forests of many obstructions which the Bad Spirit had put there, to fit them for our residence. He has placed four good Spirits at the four cardinal points, to which we point in our ceremonies. The Spirit at the North gives snow and ice, to enable men to pursue game and fish. The Spirit of the South gives melons, maize, and tobacco. The Spirit of the West gives rain, and the Spirit of the East, light; and he commands the sun to make his daily walks around the earth. Thunder is the voice of these Spirits, to whom we offer the smoke of sa-mau (tobacco).

Manabozho, it is believed, yet lives on an immense flake of ice in the Arctic Ocean. We fear the white race will some day discover his retreat, and drive him off. Then the end of the world is at hand, for as soon as he puts his foot on the earth again, it will take fire, and every living creature perish in the flames.

3. Allegory of the Origin and History of the Osages.

The following tradition is taken from the official records of the St. Louis Superintendency.

The Osages believe that the first man of their nation came out of a shell, and that this man, when walking on earth, met with the Great Spirit, who asked him where he resided, and what he eat. The Osage answered, that he had no place of residence, and that he eat nothing. The Great Spirit gave him a bow and arrows, and told him to go a-hunting. So soon as the Great Spirit left him, he killed a deer. The Great Spirit gave him fire, and told him to cook his meat, and to eat. He also told him to take the skin and cover himself with it, and also the skins of other animals that he would kill.

One day, as the Osage was hunting, he came to a small river to drink. He saw in the river a beaver hut, on which was sitting the chief of the family. He asked the Osage what he was looking for, so near his lodge. The Osage answered that, being thirsty, he was forced to come and drink at that place. The beaver then asked him who he was, and from whence he came. The Osage answered, that he had come from hunting, and that he had no place of residence. "Well, then," said the beaver, "you appear to be a reasonable man. I wish you to come and live with me. I have a large family, consisting of many daughters, and if any of them should be agreeable to you, you may marry." The Osage accepted the offer, and, sometime after, married one of the beaver's daughters, with whom he had many children. Those children have formed the Osage people. This marriage of the Osage with the beaver, has been

the cause that the Osages do not kill the beaver. They always supposed that by killing the beaver, they were killing the Osages.

4. Pottawatomie Theology.

It is believed by the Pottawatomies, that there are two Great Spirits, who govern the world. One is called Kitchemonedo, or the Great Spirit, the other Matchêmonedo, or the Evil Spirit. The first is good and beneficent; the other wicked. Some believe that they are equally powerful, and they offer them homage and adoration through fear. Others doubt which of the two is most powerful, and endeavor to propitiate both. The greater part, however, believe as I, *Podajokeed* do, that Kitchemonedo is the true Great Spirit, who made the world, and called all things into being; and that Matchêmonedo ought to be despised.

When Kitchemonedo first made the world, he filled it with a class of beings who only *looked* like men, but they were perverse, ungrateful, wicked dogs, who never raised their eyes from the ground to thank him for anything. Seeing this, the Great Spirit plunged them, with the world itself, into a great lake, and drowned them. He then withdrew it from the water, and made a single man, a very handsome young man, who, as he was lonesome, appeared sad. Kitchemonedo took pity on him, and sent him a sister to cheer him in his loneliness.

After many years the young man had a dream which he told to his sister. Five young men, said he, will come to your lodge door this night, to visit you. The Great Spirit forbids you to answer or even look up and smile at the first four; but when the fifth comes, you may speak and laugh and show that you are pleased. She acted accordingly. The first of the five strangers that called was Usama, or tobacco, and having been repulsed he fell down and died; the second, Wapako, or a pumpkin, shared the same fate; the third, Eshkossimin, or melon, and the fourth, Kokees, or the bean, met the same fate. But when Tamin, or Montamin, which is *maize*, presented himself, she opened the skin tapestry door of her lodge, and laughed very heartily, and gave him a friendly reception. They were immediately married, and from this union the Indians sprung. Tamin forthwith buried the four unsuccessful suitors, and from their graves there grew tobacco, melons of all sorts, and beans; and in this manner the Great Spirit provided that the race which he had made, should have something to offer him as a gift in their feasts and ceremonies, and also something to put into their *akeeks* or kettles, along with their meat.

5. The Island of the Blessed; or the Hunter's Dream.

There was once a beautiful girl, who died suddenly on the day she was to have been married to a handsome young hunter. He had also proved his bravery in war, so that he enjoyed the praises of his tribe, but his heart was not proof against this loss. From the hour she was buried, there was no more joy or peace for him. He went often to visit the spot where the women had buried her, and sat musing there, when, it was thought by some of his friends, he would have done better to try and amuse himself in the chase, or by diverting his thoughts in the war-path. But war and hunting had lost their charms for him. His heart was already dead within him. He wholly neglected both his war-club and his bows and arrows.

He had heard the old people say that there was a path that led to the land of souls, and he determined to follow it. He accordingly set out one morning, after having completed his preparations for the journey. At first he hardly knew which way to go. He was only guided by the tradition that he must go south. For a while he could see no change in the face of the country. Forests, and hills, and valleys, and streams, had the same looks which they wore in his native place. There was snow on the ground, when he set out, and it was sometimes seen to be piled and matted on the thick trees and bushes. At length it began to diminish, and, as he walked on, finally disappeared. The forest assumed a more cheerful appearance, the leaves put forth their buds, and before he was aware of the completeness of the change, he found he had left behind him the land of snow and ice. The air became pure and mild; the dark clouds had rolled away from the sky; a pure field of blue was above him; and, as he went forward in his journey, he saw flowers beside his path, and heard the song of birds. By these signs he knew that he was going the right way, for they agreed with the traditions of his tribe. At length he spied a path. It took him through a grove, then up a long and elevated ridge, on the very top of which he came to a lodge. At the door stood an old man with white hair, whose eyes, though deeply sunk, had a fiery brilliancy. He had a long robe of skins thrown loosely around his shoulders, and a staff in his hands.

The young man began to tell his story; but the venerable chief arrested him before he had proceeded to speak ten words. "I have expected you," he replied, "and had just risen to bid you welcome to my abode. She whom you seek passed here but a short time since, and being fatigued with her journey rested herself here. Enter my lodge and be seated, and I will then satisfy your inquiries, and give you directions for your journey from this point." Having done this, and refreshed himself by rest, they both issued forth from the lodge door. "You see yonder gulf," said the old man, "and the wide-stretching plain beyond: it is the land of souls. You stand upon its borders, and my lodge is the gate of entrance. But you cannot take your body along.

Leave it here with your bow and arrows, your bundle and your dog. You will find them safe upon your return." So saying he re-entered the lodge, and the freed traveller bounded forward as if his feet had suddenly been endowed with the power of wings. But all things retained their natural colors and shapes. The woods and leaves, and streams and lakes, were only more bright and comely than he had ever witnessed. Animals bounded across his path with a freedom and confidence which seemed to tell him, there was no blood shed there. Birds of beautiful plumage inhabited the groves, and sported in the waters. There was but one thing in which he saw a very unusual effect. He noticed that his passage was not stopped by trees or other objects. He appeared to walk directly through them: they were, in fact, but the images or shadows of material forms. He became sensible that he was in the land of souls.

When he had travelled half a day's journey, through a country which was continually becoming more attractive, he came to the banks of a broad lake, in the centre of which was a large and beautiful island. He found a canoe of white shining stone, tied to the shore. He was now sure that he had come the right path, for the aged man had told him of this. There were also shining paddles. He immediately entered the canoe, and took the paddles in his hands, when, to his joy and surprise, on turning round he beheld the object of his search in another canoe, exactly its counterpart in everything. It seemed to be the shadow of his own. She had exactly imitated his motions, and they were side by side. They at once pushed out from the shore, and began to cross the lake. Its waves seemed to be rising, and, at a distance, looked ready to swallow them up; but just as they entered the whitened edge of them, they seemed to melt away, as if they were but the images of waves. But no sooner was one wreath of foam passed, than another, more threatening still, rose up. Thus they were in perpetual fear; but what added to it was the clearness of the water, through which they could see heaps of the bones of beings who had perished before.

The Master of Life had, however, decreed to let them pass, for the *thoughts and acts* of neither of them had been bad. But they saw many others *struggling and sinking* in the waves. Old men and young men, males and females, of *all ages* and ranks were there: some passed and some sunk. It was only the *little* children, whose canoes seemed to meet no waves. At length every difficulty was gone, as in a moment, and they both leaped out on the happy island. They felt that the very air was food. It strengthened and nourished them. They wandered together over the blissful fields, where everything was formed to please the eye and the ear. There were no tempests; there was no ice, nor chilly winds; no one shivered for the want of warm clothes; no one suffered for hunger; no one mourned for the dead. They saw no graves. They heard of no wars. Animals ran freely about, but there was no blood spilled in hunting them: for the air itself nourished them. Gladly would the young warrior have remained there for ever, but he was obliged to go back for his

body. He did not see the Master of Life, but he heard his voice, as if it were a soft breeze. "Go back," said this voice, "to the land from whence you came. Your time has not yet come. The duties for which I made you, and which you are to perform, are not yet finished. Return to your people, and accomplish the acts of a good man. You will be the ruler of your tribe for many days. The rules you will observe will be told you by my messenger, who keeps the gate. When he surrenders back your body, he will tell you what to do. Listen to him, and you shall afterwards rejoin the spirit which you have followed, but whom you must now leave behind. She is accepted, and will be ever here, as young and as happy as she was when I first called her from the land of snows."

When this voice ceased, the narrator awoke. It was the fancy work of a dream, and he was still in the bitter land of snows and hunger, death and tears.

6. The Fate of the Red-Headed Magician.

Indian life is a life of vicissitudes the year round. As spring returns, the Indians who have been out during the winter, in the hunting-grounds, come back to their villages in great numbers, and, in a short time, they have nothing to eat. Among them, however, there are always several who are willing to glean the neighboring woods for game; these remove from the large villages, and usually go off in separate families to support themselves.

One of these families was composed of a man, his wife, and one son, who is called Odkshedoaph Waucheentonoah, which signifies The Child of Strong Desires. The latter was about fifteen years old.

They arrived, the first day, at a place which they thought suitable to encamp at. The wife fixed the lodge — the husband went to hunt. Early in the evening he returned with a deer. He and his wife being tired, he requested his son to go after some water, to the river near by. He replied that it was dark, and he dared not go. No persuasion availing, the father brought it. There was a village in the vicinity of this place, in which was a warrior of another tribe, called the Red-Head, who was celebrated for his bravery and his warlike deeds. The young men of the neighboring villages had attempted, in vain, to take his scalp — he was too powerful and subtle for their valor or cunning. He lived on an island in the middle of a lake.

The father told the son that, if he was afraid to go to the river for water after dark, he would never kill the Red-Head. The young man was greatly mortified at these observations — he would eat nothing, neither would he speak.

The next day he asked his mother to dress the skin of the deer, and make it into moccasins for him — while he busied himself in making a bow and four arrows. Without speaking to his father or mother, he departed at sunrise in the morning, and

fired one of his arrows, which fell towards the west, which he took for his course. At night he came to the place where his arrow had fallen, and, to his joy, he found it in a deer. On a piece of this he feasted. The next morning he fired another, and at night he found it in another deer. In this manner he fired the four, and was equally fortunate with all; and what was very singular, he carelessly left all of his arrows sticking in the carcasses of the deers he had killed.

During the fifth day he was in great distress — having nothing to eat, nor anything to obtain food with. Towards night he threw himself upon the ground in utter despair, concluding that he might as well perish there, as go farther and meet with the same end. But soon he heard a hollow rumbling noise in the ground beneath him— he sprang up, and discovered at a distance a figure like that of a human being, afar off, walking with a stick, in a wide hard path leading from a lake to a cabin, in the middle of a large prairie. To his surprise this cabin was near to him. He approached a little nearer, and concealed himself. He soon discovered that the figure was no other than that terrible witch Wokonkahlohn Zooeyah'pee Kahhaitchee—or the Little Old Woman who makes War. Her path to the lake was perfectly solid, from her frequent visits to the water; and the noise our adventurer had heard was occasioned by her striking her walking-stick upon the ground. On the top of this cane were tied by the toes birds of every feather — who, whenever the stick struck the earth, fluttered and sang in concert their various songs.

She entered the cabin, and (unperceived by him) laid off her mantle, which was entirely made of the scalps of women. Before folding it she shook it several times, and every time these scalps uttered loud and repeated shouts of laughter, in which the old hag joined. Nothing could have frightened him more than these sounds, which he could in no manner account for. After she had laid by the cloak, she came directly to him; she having known where he was all the while. She told him neither to fear nor despair, for she would be his friend and protector. She took him into her cabin, and gave him a supper. She inquired his motives for visiting her. He gave her his history, and stated his difficulties, and the manner he had been disgraced. She cheered him, and assured him he would be a brave man yet.

His hair being very short, she took a large leaden comb, and after drawing it through several times, his hair became very long. She then proceeded to dress him as a female, furnishing him with the necessary garments, painting his face in a beautiful manner, and presented him with a basin of shining metal. She directed him to put in his girdle a blade of that wide grass, the edge of which is very sharp, and to go in the morning to the bank of the lake, which was no other than that where Red-Head reigned. She advised him that there would be many Indians on the island, who, when he used his basin to drink with, would discover him, and come to him to solicit him to be their wife, and to take him across to the island. This he was to refuse, and say that he had come a great way to be the wife of

Red-Head; and that if he could not cross with his own canoe for her, he should return to his village. Soon Red-Head would come in his own canoe, in which he was to cross to consent to become his wife; and in the evening he must induce him to walk, when he was to take the first convenient opportunity to cut off his head with the blade of grass. She gave him also general advice of the manner he was to conduct himself, to sustain the assumed character of a woman. His fears would scarcely permit him to accede to this plan; but the recollection of his father's words and looks decided him.

Early the next morning he left the cabin of the old woman, and took his way to the bank of the lake. He arrived at a place directly opposite the village of Red-Head. It was a beautiful day; the heavens were clear, and the sun shone with great radiance.

He had not sauntered long upon the beach, displaying his basin (which glistened astonishingly) to those on the island, by frequently dipping the water and drinking therefrom, before many came to see him; and all who saw, admiring his dress and personal charms, became suitors and proposed marriage. All offers were rejected, as the witch had advised. At length the Red-Head, hearing of the speech of this wonderful girl, crossed in his own canoe, which was manned by his own men, and the ribs of which were made of living rattlesnakes, who were to warn him of all treachery and defend him from his enemies. Our adventurer had no sooner stepped into the canoe, than they commenced a terrible hissing and rattling, which nearly frightened him out of his wits. They were pacified and finally quieted by Red-Head, whose proposals were accepted. The fancied bride immediately embarked with him, and, after landing upon the island, the marriage took place, and the bride made various valuable presents to Red-Head, which had been furnished by the hag.

As they were sitting in the cabin of Red-Head, around whom was collected his numerous relations, the mother of Red-Head regarded with an attentive eye, for a long time, the face of her new daughter-in-law. From this scrutiny, she was firmly convinced that this singular marriage augured no good to her son. She drew her husband to another part of the lodge, and disclosed to him her suspicions. "This can be no female," said she. "The figure and manners, the countenance, and, more especially, the expression of the eyes, are, beyond doubt, those of a man." Her husband immediately rejected her suspicions, and rebuked her severely for the indignity offered her daughter-in-law. He became so angry, that, seizing the first thing which came to hand, which happened to be his pipe-stem, and one of a good size, he beat his wife in a most unmerciful manner.

Upon inquiry, the spectators were informed of the cause of the difficulty; soon after which our adventurer, rising, told Red-Head that, after receiving so gross and outrageous an insult from his relations, he could not think of remaining with him as his wife, but should return at once to his own village and friends. He left the lodge,

followed by Red-Head, and walked until he came upon the beach of the island, near the place where he first landed. Red-Head entreated him to remain. He urged every argument and every motive which he thought could have weight, but they were all rejected. During this conference, they had seated themselves upon the ground, and Red-Head, in great sorrow, had reclined himself upon our adventurer's lap, who used various means to soothe him, and occasionally yielded apparently to his desire to have him remain. Finally, after one of these promises, his feelings having become calm, Red-Head fell into a deep sleep. Immediately our adventurer seized his blade of grass, and applying it to the neck of Red-Head, drew it across and severed the head from the body. Stripping himself of his dress, he caught the head, and, plunging into the lake, just reached the other shore when he discovered in the darkness of the night the torches of those who were searching for the new-married couple. He listened until they had found the headless body, and heard their piercing shrieks of sorrow, when he took his way to the cabin of his adviser.

When he reached the cabin, how much did the Witch rejoice at his success! She admired his prudence, and told him his bravery could never be questioned again.

Taking the head, she said he need only have brought the scalp; then cutting off a small piece for herself, she informed him he might now return home with the head which would be an evidence of an achievement, that would cause him to be respected among all Indians. "In your way home you will meet with but one difficulty. The *God of the Earth*, Maunkahkeeshwoccaung, requires an offering from those who perform the most extraordinary achievements. As you walk along in a prairie there will be an earthquake — the earth will open and divide the prairie in the middle. Take this *partridge* and throw it into the opening, and instantly spring over it." All this happened precisely as she had foretold, and he reached a place near his village in safety where he secreted the head of Red-Head. On entering the village he found that his parents had returned to that place, and that they were in great sorrow and distress for the loss of their son. One and another of the young men had presented themselves to the disconsolate parents, and said, "Look up, I am your son." Having been often deceived in this manner, when their own son presented himself they sat with their heads down and with their eyes nearly blinded with weeping. It was long before they could be prevailed upon to bestow a glance upon him. It was yet longer before they recognised him for their son; but when he recounted his adventures they believed him mad—the young men laughed at him. He left the lodge, and returned after a short absence with the Red Head. That well-known head was soon recognised, and our adventurer was immediately placed among the first warriors of the nation, and himself and family were ever after greatly respected and esteemed.

7. The Magic Circle in the Prairie.—An Allegory.

A young hunter found a circular path one day in a prairie, without any trail leading to, or from it. It was smooth and well-beaten, and looked as if footsteps had trod in it recently. This puzzled and amazed him. He hid himself in the grass near by, to see what this wonder should betoken. After waiting a short time, he thought he heard music in the air. He listened more attentively and could clearly distinguish the sound, but nothing could be seen but a mere speck, like something almost out of sight. In a short time it became plainer and plainer, and the music sweeter and sweeter. The object descended rapidly, and when it came near it proved to be a car or basket of ozier containing twelve beautiful girls, who each had a kind of little drum which was struck with the grace of an angel. It came down in the centre of the ring, and the instant it touched the ground they leapt out and began to dance in the circle, at the same time striking a shining ball.

The young hunter had seen many a dance, but none that equalled this. The music was sweeter than ever he had heard. But nothing could equal the beauty of the girls. He admired them all, but was most struck with the youngest. He determined to seize her, and after getting near the circle without giving alarm made the attempt; but the moment they spied a man, they all nimbly leapt into the basket and were drawn back to the skies.

Poor Algon the hunter was completely foiled. He stood gazing upward as they withdrew till there was nothing left, and then began to bewail his fate. "They are gone for ever, and I shall see them no more." He returned to his lodge, but he could not forget this wonder. His mind preyed upon it all night, and the next day he went back to the prairie, but in order to conceal his design he turned himself into an opossum. He had not waited long when he saw the wicker car descend, and heard the same sweet music. They commenced the same sportive dance, and seemed even more beautiful and graceful than before. He crept slowly towards the ring, but the instant the sisters saw him they were startled, and sprang into their car. It rose but a short distance when one of the elder sisters spoke. "Perhaps," said she, "it is come to show us how the game is played by mortals." "Oh no!" the youngest replied, "quick, let us ascend." And all joining in a chant, they rose out of sight.

Algon returned to his own lodge again; but the night seemed a very long one, and he went back betimes the next day. He reflected upon the plan to follow to secure success. He found an old stump near by in which there were a number of mice: he thought their small form would not create alarm, and accordingly assumed the shape of a mouse. He first brought the stump and set it up near the ring. The sisters came down and resumed their sport. "But see," cried the younger sister, "that stump was not there before." She ran affrighted towards the car. They only smiled, and

gathering round the stump, struck it in jest, when out ran the mice, and Algon among the rest. They killed them all but one, which was pursued by the youngest sister; but just as she had raised her stick to kill it, the form of the hunter arose, and he clasped his prize in his arms. The other eleven sprang to their ozier basket and were drawn up to the skies.

He exerted all his skill to please his bride and win her affections. He wiped the tears from her eyes. He related his adventures in the chase. He dwelt upon the charms of life on the earth. He was incessant in his attentions, and picked out the way for her to walk as he led her gently towards his lodge. He felt his heart glow with joy as she entered it, and from that moment he was one of the happiest of men. Winter and summer passed rapidly away, and their happiness was increased by the addition of a beautiful boy to their lodge circle. She was in truth the daughter of one of the stars, and as the scenes of earth began to pall upon her sight, she sighed to revisit her father. But she was obliged to hide these feelings from her husband. She remembered the charm that would carry her up, and took occasion while Algon was engaged in the chase to construct a wicker basket, which she kept concealed. In the mean time she collected such rarities from the earth as she thought would please her father as well as the most dainty kinds of food. When all was in readiness, she went out one day while Algon was absent to the charmed ring, taking her little son with her. As soon as they got into the car, she commenced her song and the basket rose. As the song was wafted by the winds, it caught her husband's ear. It was a voice which he well knew, and he instantly ran to the prairie. But he could not reach the ring before he saw his wife and child ascend. He lifted up his voice in loud appeals, but they were unavailing. The basket still went up. He watched it till it became a small speck, and finally it vanished in the sky. He then bent his head down to the ground, and was miserable.

Algon bewailed his loss through a long winter and a long summer. But he found no relief. He mourned his wife's loss sorely, but his son's still more. In the meantime, his wife had reached her home in the stars, and almost forgot, in the blissful employments there, that she had left a husband on the earth. She was reminded of this by the presence of her son, who, as he grew up, became anxious to visit the scene of his birth. His grandfather said to his daughter one day, "Go, my child, and take your son down to his father, and ask him to come up and live with us. But tell him to bring along a specimen of each kind of bird and animal he kills in the chase." She accordingly took the boy and descended. Algon, who was ever near the enchanted spot, heard her voice as she came down the sky. His heart beat with impatience as he saw her form and that of his son, and they were soon clasped in his arms.

He heard the message of the Star, and began to hunt with the greatest activity, that he might collect the present. He spent whole nights, as well as days, in searching for every curious and beautiful bird or animal. He only preserved a tail, foot, or

wing of each, to identify the species; and, when all was ready, they went to the circle and were carried up.

Great joy was manifested on their arrival at the starry plains. The star-chief invited all his people to a feast, and, when they had assembled, he proclaimed aloud, that each one might take of the earthly gifts such as he liked best. A very strange confusion immediately arose. Some chose a foot, some a wing, some a tail, and some a claw. Those who selected tails or claws were changed into animals, and ran off; the others assumed the form of birds, and flew away. Algon chose a white hawk's feather, which was his totem. His wife and son followed his example, when each one became a white hawk. He spread his wings, and, followed by his wife and son, descended to the earth, where his species are still to be found.

8. The History of the Little Orphan who carries the White Feather. — A Dacota Legend.

There was an old man with his grandchild, whom he had taken when quite an infant, who lived in the middle of a forest. The child had no other relative. They had all been destroyed by six large giants, and he was not informed that he ever had any other parent or protector than his grandfather. The nation to whom he belonged had put up their children as a wager against those of the giants, upon a race, which the giants gained, and thus destroyed all the other children. Being the sixth child, he was called Chácopee.

There was a prediction, that there would be a great man of this nation, who would wear a white feather, and who would astonish every one with his skill and bravery.

The grandfather gave the child a bow and some arrows to play with. He went into the woods and saw a rabbit, but not knowing what it was, he came to his grandfather and described it to him. He told him what it was, and that it was good to eat, and that if he shot one of his arrows at it, he would probably kill it. He did so; and in this manner he continued on hunting under the instructions of his grandfather, acquiring skill in killing deer and other large animals, and he became an approved hunter.

His curiosity was excited to know what was passing in the world. He went one day to the edge of a prairie, where he saw ashes like those at his home, and poles of lodges. He returned and inquired if his grandfather made them. He was told that he had not, nor had he seen any such things; that it was all his imagination.

Another day he went out to see what there was curious, and on entering into the woods, he heard a voice calling after him — "Come here, you wearer of the white feather. You do not wear the white feather yet, but you ought to wear it. Return home and take a short nap. When asleep, you will hear a voice which will tell you

to rise and smoke; you will see in your dream a pipe, sack, and a large white feather. When you awake you will find these articles. Put the feather on your head, and you will become a great hunter, a great warrior, and a great man, capable of doing anything. As a proof that you will be a great hunter, when you smoke the smoke will turn into pigeons." He then informed him who he was; of the fate of his real parents, brothers, and sisters; and of the imposition his grandfather now practised on him. He gave him a vine, and told him he was of an age to revenge his relations. "When you meet your enemy, you will run a race with him; he will not see the vine, it being enchanted. When you are running with him, you will throw it over his head, and entangle him so as you will win the race." Long ere this speech was ended, he had turned to the quarter from whence the voice came, and, to his astonishment, saw there was another man in the world beside his grandfather; but what most surprised him was that this was an old man, who, from his breast down, was *wood*, and he appeared to be immoveably fixed to the earth.

He returned home, slept, heard the voice, awakened, and found the promised articles. His grandfather was greatly surprised to find him with a white feather, and to see flocks of pigeons flying out of his lodge. He then recollected what had been predicted, and began to weep at the prospect of losing his charge.

He departed the next morning for the purpose of seeking his enemies and revenging himself upon them. He came to a large lodge in the middle of a wood, which was occupied by his enemies, the giants, the inhabitants of which had been apprised of his coming by the *little spirits who carry the news.* They came out and gave the cry of joy, and as he approached nearer, they began to make sport of him among themselves, saying, "Here comes the little man with the white feather, who is to do such wonders;" but at the same time to him they talked very fair, telling him he was a brave man, and would do every thing. This was to encourage him to go on to his own destruction. He knew, however, what they were about.

Chácopee went into the lodge fearlessly, and they told him to commence the race with the smallest of them. The goal, or stake to which they run, was a peeled tree, towards the rising sun, and then back to the starting place, where was a Chaunkahpee, or war-club, made of wood as hard as iron, which he who won the race was to use to cut off the other's head with. They ran;—Chácopee used his vine and gained the race, and immediately cut off his competitor's head. In this manner he destroyed five of them. This was the work of five successive mornings. The survivor wished him to leave the heads as he cut them off; as they believed by one of their medicines they could unite them again to the bodies; but the little champion insisted upon carrying them to his grandfather.

On the sixth morning, before he went to the giant's lodge, he saw his old counsellor, who was stationary in the woods, who told him that he was about to be deceived; that he had never known any other sex than his own; that as he was on his way to

the lodge he would meet the most beautiful woman in the world, to whom he was to pay no attention, but on meeting her to wish himself to change into a male elk; that the transformation would take place, and the animal would go to feeding, and not regard the woman.

He proceeded towards the lodge, met the temptress, and became an elk. She reproached him (this woman, by the way, was the sixth giant) for having turned into an elk on seeing her, who had travelled a great distance for the purpose of courting him and becoming his wife. Her reproaches and beauty affected him so much that he wished himself a man again, and he at once resumed his natural shape. They sat down together, and he began to caress and make love to her, and finally laid his head in her lap and went to sleep. She kept pushing him off her lap, for the purpose of trying if he was sound asleep, and when it awakened him, told him she disturbed him because he laid too heavy upon her. Finally, when he became very sound asleep, she took her axe and broke his back. She then assumed her natural shape, which was that of the sixth giant, changed Chácopee into a dog, and made him follow her towards the lodge in that degrading shape. He took the white feather, and stuck it in his own head.

There was an Indian village at some distance, in which were two girls, rival sisters, the daughters of a chief, who were doing penance for the purpose of enticing the carrier of the white feather to their village. They each hoped to make him their husband. They each made themselves lodges a short distance from the village. As he approached, the girls saw the white feather, and the eldest prepared her lodge in a neat manner, for the purpose of receiving him. The other, supposing his choice would not be made for such parade, as he was a wise man, touched nothing about her lodge. The eldest went out and met him, and invited him in. He accepted the invitation, and soon made her his wife. The youngest invited the dog into her lodge, made him a good bed, and treated him with attention, as if he were her husband.

The sixth giant, supposing that whoever possessed the white feather possessed also all its virtues, went out upon the prairie to hunt, but returned without anything. The dog went out the same day hunting upon a river, and drew a stone out of the water, which immediately became a beaver. The next day the giant followed the dog, and, hiding behind a tree, saw the dog go to the river and draw out a stone, which at once turned into a beaver. As soon as the dog had left the place, the giant went to the river, and pulling out a stone, had the satisfaction of seeing it transformed into a beaver also. Tying it to his belt, he carried it home, and, as is customary, threw it down by the door of his lodge and entered in. After he had been seated a short time, he told his wife to bring in his belt, or collar. She did so; and returned with it, tied to nothing but a *stone*.

The next day, the dog finding his method of catching beavers was discovered by the giant, went to a wood at some distance, and broke off a limb from a tree which had

been scorched black by the fire, which immediately became a bear. The giant, who had again watched him, did the same, and carried a bear home, but his wife could find nothing but a burnt stick tied to his belt.

The next day, the wife determined she would go to her father, and let him know what a valuable hunter she had for her husband. As soon as they had departed, the dog made signs to his mistress, or wife, to sweat him after the manner of the Indians. She accordingly made a lodge, just large enough for him to creep into, put in heated stones in such a manner that she could pour water upon them, and after she had sweated him thus for some time, he came out a very handsome man, but had not the power of speech.

The eldest daughter went to her father, and told him of the disgraceful manner in which her sister lived with a dog, and also of his singular faculty for hunting.

The old man suspecting there was some magic in it, sent a deputation of young men and women to ask her to come to him, and to bring her dog with her. They went, and were much surprised to find in the place of the dog so fine a young man. They accompanied the delegation to the father, who was also much astonished. He assembled all the wise and aged men of the nation, to see the strange exploits of the wearer of the white feather, which it was understood he could perform. The giant took his pipe and filled it, and passed it to the Indians, to see if anything would happen when they smoked. It passed around to the dog, who made a sign to pass it to the giant first, which was done; but he effected nothing. Then the dog-man took it, and made a sign to them to put the white feather upon his head. This was done—immediately he regained his speech; he smoked, and behold immense flocks of pigeons rushed from the smoke.

The chief demanded of him his history, which he recounted to him faithfully. The chief, after it was finished, ordered that the giant should be transformed into a dog, and turned into the middle of the village, and that the boys should with clubs pound him to death.

The chief then ordered, on the petition of the White-Feather, that all the young men should employ themselves four days in making arrows, and gave him a buffalo robe. This robe the White-Feather cut into small pieces, and sowed in the prairie. At the end of the four days he invited them to a buffalo hunt; and they found that those pieces of skin had become a very large herd of buffalo. They killed as many as they pleased, and had a grand feast.

The White-Feather then got his wife to ask her father if he would permit her to visit White-Feather's grandfather with him. He replied to this solicitation that a woman must follow her husband into whatever quarter of the world he may choose to go.

They departed, made their visit, and were received with joy.

B. INDIAN PICTOGRAPHY.

Observations on the Pictographic Method of Communicating Ideas by Symbolic and Representative Devices of the North American Indians.

Pictographic scrolls and devices, rudely cut or painted on wood, rocks, or the scarified trunks of trees, and even songs recorded by this method, are well known traits of our aboriginal tribes. Nothing, indeed, is more common. It was thought due to the character of the tribes to examine the subject, with a view to determine the system of symbols, if system it may be called; and to discover the rules by which the symbols are to be interpreted.

Perhaps the art merits the term of picture-writing. It offers, at least, a new point of comparison and resemblance between our wild hunter tribes and other barbaric nations, and particularly the more advanced communities of Mexico and Peru. If we mistake not, the system is radically the same. Both are largely mnemonic, and it is essential to their explanation that the interpreter be acquainted, not only with the characteristic points and customs of their history, but with their peculiar mythology, idolatry, and mode of worship. It is certainly the only method these tribes possess of communicating ideas. But whatever rank may be assigned the system, the topic is curious and important in considering the mental capacities of the race; and it could not well be omitted in any enlarged view of them.

1. Preliminary Considerations.

Pictorial and symbolical Representations constitute one of the earliest observed traits in the Customs and Arts of the American Aborigines. — This Art found to assume a systematic Form, among the rude Hunter Tribes of North America, in the year 1820, when it was noticed on the Source of the Mississippi. — This Instance given, with a Drawing. — The Hint pursued.

The practice of the North American tribes, of drawing figures and pictures on skins, trees, and various other substances, has been noticed by travellers and writers from the earliest times. Among the more northerly tribes, these figures are often observed on that common substitute for the ancient papyrus among these nations, the bark of

the *betula papyracea*, or white birch: a substance possessing a smooth surface, easily impressed, very flexible, and capable of being preserved in rolls. Often these devices are cut, or drawn in colors, on the trunks of trees, more rarely on rocks or boulders, when they are called muzzinábiks. According to Colden and Lafitou, records of this rude character were formerly to be seen, on the blazed surface of trees, along the ancient paths and portages leading from the sources of the rivers of New York and Pennsylvania which flow into the Atlantic, and in the Valley of the St. Lawrence. Pictorial drawings, and symbols of this kind, are now to be found only on the unreclaimed borders of the great area west of the Alleghanies and the Lakes; in the wide prairies of the West; or along the Missouri and the Upper Mississippi. It is known that such devices were in use, to some extent, at the era of the discovery, among most of the tribes situated between the latitudes of the capes of Florida and Hudson's Bay, although they have been considered as more particularly characteristic of the tribes of the Algonquin type. In a few instances, these simple pictorial inscriptions have been found to partake of a monumental cast, by being painted or stained on the faces of rocks, or on large loose stones on the banks of streams; and still more rarely, devices were scratched or pecked into the surface, as is found on Cunningham's Island, in Lake Erie, and in the Valley of the Alleghany, at Venango. Those who are intent on observations of this kind will find figures and rude inscriptions, at the present time, on the grave-posts which mark the places of Indian sepulture at the West and North. The tribes who rove over the western prairies, inscribe them on the skins of the buffalo. North of latitude 42°, the southern limit of the birch, which furnishes at once the material of canoes, wigwams, boxes, and other articles, and constitutes, in fact, the Indian paper, tablets of hard-wood are confined to devices which are hieratic, and are employed alone by their priests, prophets, and medicine-men; and these characters uniformly assume a mystical or sacred import. The recent discovery, on one of the tributaries of the Susquehanna, of an Indian map drawn on stone, with intermixed devices, a copy of which appears in the first volume of the collections of the Historical Committee of the American Philosophical Society, Philadelphia, proves, although it is thus far isolated, that stone was also employed in that branch of inscription. This discovery was in the area occupied by the Lenapees, who are known to have practised the art, which they called Ola Walum.

Colden, in his history of the Five Nations,[1] informs us that when, in 1696, the Count de Frontenac marched a well-appointed army into the Iroquois country, with artillery and all other means of regular military offence, he found, on the banks of the Onondaga, now called Oswego River, a tree, on the trunk of which the Indians had depicted the French army, and deposited two bundles of cut rushes at its foot, con-

[1] London Edition, 1747, page 190.

sisting of 1434 pieces; an act of symbolical defiance on their part, which was intended to inform their Gallic invaders that they would have to encounter this number of warriors. In speaking, in another passage, of the general traits of the Five Nations, he mentions the general custom prevalent among the Mohawks going to war, of painting with red paint on the trunk of a tree, such symbols as might serve to denote the object of their expedition. Among the devices was a canoe pointed towards the enemy's country. On their return, it was their practice to visit the same tree, or precinct, and denote the result pictographically; the canoe being, in this case, drawn with its bows in the opposite or home direction. Lafitou, in his account of the nations of Canada, makes observations on this subject which denote the general prevalence of the custom in that quarter. Other writers, dating as far back as Smith and De Bré, bear testimony to the existence of this trait among the Virginia tribes. Few have, however, done more than notice it, and none are known to have furnished any amount of connected details.

A single element in the system attracted early notice. I allude to the institution of the Totem, which has been well known among the Algonquin tribes from the settlement of Canada. By this device, the early missionaries observed that the natives marked their division of a tribe into clans, and of a clan into families, and the distinction was thus very clearly preserved. Affinities were denoted and kept up, long after tradition had failed in its testimony. This distinction, which is marked with much of the certainty of heraldic bearings as known in the feudal system, was seen to mark the arms, the lodge, and the trophies of the North American chief and warrior. It was likewise employed to give identity to the clan of which he was a member, on his *ad-je-dá-tig*, or grave-post. This record went but little farther in communicating information; a few strokes or geometric devices were drawn on these simple monuments, to denote the number of men he had slain in battle.

It has not been suspected, in any notices to which I have had access, that there was what may be called a pictorial alphabet, or a series of homophonous figures, in which, by the juxtaposition of symbols representing acts, as well as objects of action, and by the introduction of simple adjunct signs, a series of disjunctive, yet generally connected ideas, were denoted; or that the most prominent incidents of life and death could be recorded so as to be transmitted from one generation to another, as long, at least, as the monument and the people endured. Above all, it was not anticipated that there should have been found, as will be observed in the subsequent details, a system of symbolic notation for the songs and incantations of the Indian medas and priests, making an appeal to the memory for the preservation of language and musical notes.

Persons familiar with the state of the western tribes of this continent, particularly in the higher northern latitudes, have long been aware that the songs of the Indian priesthood and wabenoes, were sung from a kind of pictorial notation, made on bark.

It is a fact which has often come to the observation of military officers performing duties on those frontiers, and of persons exercising occasional functions in civil life, who have passed through their territories. But there is no class of persons to whom the fact of such notations is so well known, as the class of Indian traders and interpreters who visit or reside a part of the season at the Indian villages. I have never conversed with any of this latter class of persons, to whom the fact of such inscriptions, made in various ways, was not so familiar as in their view to excite no surprise, or seldom to demand remark.

My attention was first called to the subject in 1820. In the summer of that year I was a member of the United States exploring expedition to the sources of the Mississippi. At the mouth of the small river Huron, on the banks of the Lake Superior, there was an Indian grave fenced around with saplings, and protected with much care. At its head stood a post, a tabular stick, upon which was drawn the figure of the animal which was the symbol of the clan to which the deceased chief belonged. Strokes of red paint were added, to denote either the number of war parties in which he had been engaged, or the number of scalps he had actually taken from the enemy. The interpreter who accompanied us, and who was himself of part Indian blood, gave the latter, as the true import of these marks.

On quitting the river St. Louis, which flows into the head of the lake at the Fond du Lac, to cross the summit dividing its waters from those of the Mississippi, the way led through dense and tangled woods and swamps, and the weather proved dark and rainy, so that, for a couple of days together, we had scarcely a glimpse of the sun.

The party consisted of sixteen persons, with two Indian guides; but the latter, with all their adroitness in threading the mazes of the wilderness, were completely lost for nearly an entire day. At night, during the bewilderment, we lay down on ground elevated but a few inches above the level of a swamp. The next morning, as we prepared to leave the camp, a small strip of birch bark, containing devices, was observed elevated on the top of a split sapling, some eight or ten feet high. One end of this pole was thrust firmly into the ground, leaning in the direction we were to go. On going up to this object, it was found, with the aid of the interpreter, to be a symbolic record of the circumstances of our crossing this summit, and of the night's encampment at this spot. Each person was appropriately depicted, distinguishing the soldiers from the officer in command, and the latter from the savans of the party. The Indians themselves were depicted without hats; a hat being, as we noticed, the general symbol for a white man or European. The entire record, of which a figure is annexed, (Plate 47, fig. D,) accurately symbolized the circumstances; and they were so clearly drawn, according to their conventional rules, that the intelligence would be communicated thereby to any of their people who might chance to wander this way. This was the object of the inscription. The scroll was interpreted thus:—

PROVERBS CHAP XXX.

Drawn by Capt. S. Eastman U.S.A.

PICTOGRAPHIC WRITING.

Fig. No. 1 represents the subaltern officer in command of the party of the United States troops. He is drawn with a sword to denote his official rank. No. 2 denotes the person who officiated in quality of secretary. He is represented as holding a book; the Indians having understood him to be an attorney. No. 3 denotes the geologist and mineralogist of the party. He is drawn with a hammer. Nos. 4 and 5 are attachés; No. 6, the interpreter.

The group of figures marked 9, represents eight infantry soldiers, each of whom, as shown in group No. 10, was armed with a musket. No. 15 denotes that they had a separate fire, and constituted a separate mess. Figs. 7 and 8 represent the two Chippewa guides, the principal of whom, called Chamees, or the Pouncing-hawk, led the way over this dreary summit. These are the only human figures depicted on this unique bark-letter, who are drawn without the distinguishing symbol of a hat. This was the characteristic seized on by them, and generally employed by the tribes, to distinguish the *Red* from the *White* race. Figs. 11 and 12 represent a prairie hen, and a green tortoise, which constituted the sum of the preceding day's chase, which were eaten at the encampment. The inclination of the pole was designed to show the course pursued from that particular spot: there were three hacks in it below the scroll of bark, to indicate the estimated length of this part of the journey, computing from water to water; that is to say, from the head of the portage Aux Couteaux, on the St. Louis river, to the open shores of Sandy Lake, the Ka-ma-ton-go-gom-ag, or Comtaguma of the Odjibwas.

The story was thus briefly and simply told; and this memorial was set up by the guides to advertise any of their countrymen, who might chance to wander in that direction, of the adventure — for it was evident, both from the course taken, and the dubiousness which had marked the prior day's wanderings, that they regarded our transit over this broad savannah in this light.

Before we had penetrated quite to this summit, we came to another evidence of their skill in this species of knowledge, consisting of one of those contrivances which they denominate Man-i-to-wa-tig, or sacred structures. On reaching this spot, our guides shouted, whether from superstitious impulse, or the joy of having found the spot, we could not tell: we judged the latter. It consisted of eight poles, of equal length, shaved smooth and round, painted with yellow ochre, and set so as to enclose a square area. It appeared to have been one of those rude temples, or places of incantation or worship, known to the medas or priests, where certain rites and ceremonies are performed. But it was not an ordinary medicine lodge. There had been far more care in its construction.

On reaching the village of Sandy Lake, on the upper Mississippi, the figures of animals, birds, and other devices, were found on the rude coffins or wrappings of their dead, which were scaffolded around the precincts of the fort, and upon the open shores of the lake. Similar devices were also observed here, as at other points in this region,

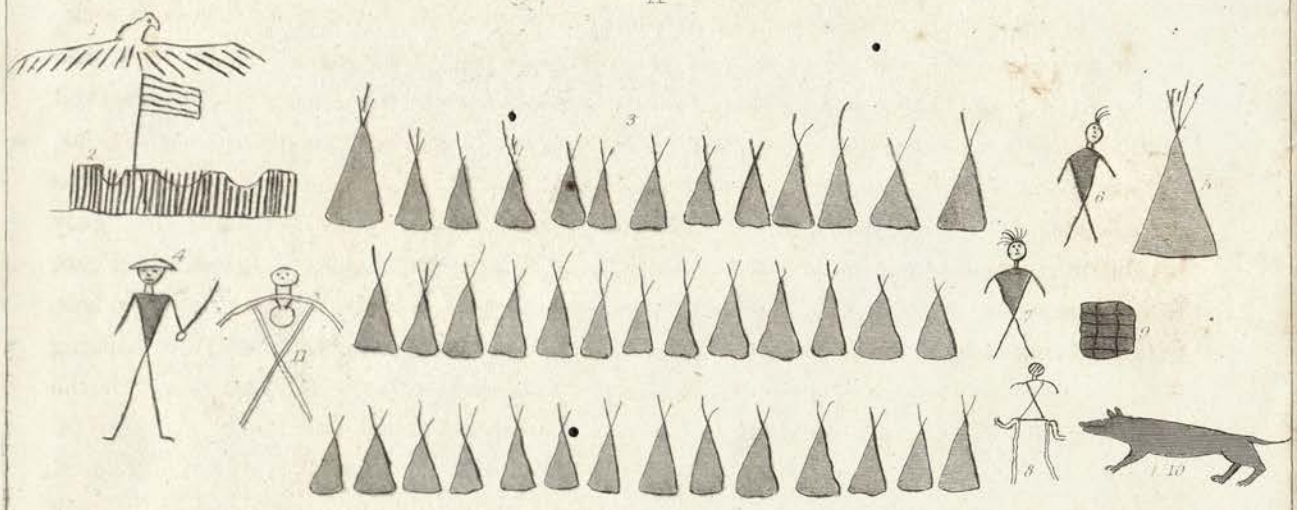
upon their arms, war-clubs, canoes, and other pieces of movable property, as well as upon their grave-posts.

In the descent of the Mississippi, we observed pictorial devices painted on a rock, below and near the mouth of Elk River, and at a rocky island in the river, at the Little Falls. In the course of our descent to the Falls of St. Anthony, we observed another bark-letter, (A, Plate 48,) as the party now began to call these inscriptions, suspended on a high pole, on an elevated bank of the river, on its west shore. At this spot, where we encamped for the night, and which is just opposite a point of highly crystallized hornblende rock, which, from this rude memorial, we called the Peace Rock, there were left standing the poles or skeletons of a great number of Sioux lodges. On inspecting this scroll of bark, we found it had reference to negotiations for bringing about a permanent peace between the Sioux and Chippewas. A large party of the former, from St. Peters, headed by their chief, had proceeded thus far, in the hope of meeting the Chippewa hunters, on their summer hunt. They had been countenanced or directed in this step by Colonel Leavenworth, the commanding officer of the new post, just then about to be erected. The inscription, which was read off at once by the Chippewa chief Babesacundabee, who was with us, told all this; it gave the name of the chief who had led the party, and the number of his followers, and imparted to that chief the first assurance he had that his mission, for the same purpose, from the sources of the Mississippi, would be favorably received by the Sioux. This scroll, denoting the same art to be possessed by the Dacota family of tribes, is described in Plate 48.

After our arrival at St. Anthony's Falls, it was found that this system of picture writing was as familiar to the Dacotah, as we had found it among the Algonquin race. At Prairie du Chien, and at Green Bay, the same evidences were observed, in their memorials of burial, among the Menomonies and the Winnebagoes; at Chicago among the Pottawatomies, and at Michillimackinac, among the Chippewas and Ottawas who resort, in such numbers, to that Island. While at the latter place, I went to visit the grave of a noted chief of the Menomonie tribe, who had been known by his French name of TOMA, i. e., Thomas. He had been buried on the hill west of the village; and on looking at his Ad-je-da-tig or grave-post, it bore a pictorial inscription of this kind, commemorating some of the prominent achievements of his life.

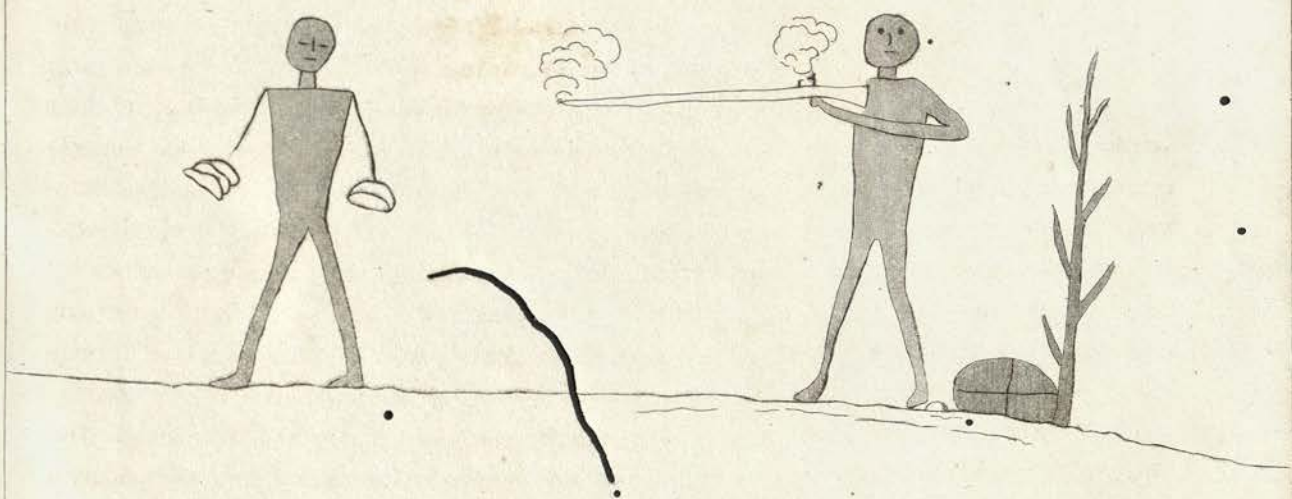
These hints served to direct my attention to the subject, when I returned to the country in an official capacity, in 1822. It was observed that the figures of a deer, a bear, a turtle, and a crane, according to this system, stand respectively for the names of men, and preserve the language very well, by yielding to the person conversant with it the corresponding words, of Addick, Muckwa, Mickenack, and Adjeejauk. Marks, circles, dots, and drawings of various kinds, were employed to symbolize the number of warlike deeds. Adjunct devices appeared to typify or explain adjunct acts. The character itself, they called KEKEEWIN. If the system went no farther, the record would

A



DAHCOTA MISSION OF PEACE.1820.

B



WARNING AGAINST TRESPASS.

Drawn by Capt. Eastman U.S.A. Illman & Sons

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yield a kind of information both gratifying and useful to a people without letters. There was abundant evidence in my first year's observation, to denote that this mode of communication was in vogue generally and well understood by the northern tribes, for burial, and what may be called geographical purposes; but it hardly seemed susceptible of a farther or extended use. A personal acquaintance with one of their Medas named SHINGWAUKÖNCE, a man of much intelligence, and well versed in their customs, religion, and history, denoted a more enlarged application of it. I observed in the hands of this man a tabular piece of wood, covered over on both sides with a series of devices cut between parallel lines, which he referred to, as if they were the notes of his medicine and mystical songs. I heard him sing these songs, and observed that their succession was, to a great extent, fixed and uniform. By cultivating his acquaintance, and by suitable attentions and presents, such as the occasion rendered proper, he consented to explain the meaning of each figure, the object symbolized, and the words attached to each symbol. By this revelation, which was made with closed doors, I became, according to his notions, a member or initiate of the Medicine Society, and also of the Wabeno Society. Care was taken to write each sentence of the songs and chants in the Indian language, with its appropriate devices, and to subjoin a literal translation in English. When this had been done, and the system considered, it was very clear that the devices were mnemonic—that any person could sing from these devices, very accurately, what he had previously committed to memory, and that the system revealed a curious scheme of symbolic notation.

All the figures thus employed as the initiatory points of study, related, exclusively, to either the medicine dance, or the wabeno dance; and each section of figures related, exclusively, to one or the other. There was some intermixture or commingling of characters, as the class of subjects was sometimes common to each. It was perceived, subsequently, that the pictographic signs permitted a classification of symbols, applied to the war-songs, to hunting, and to other specific topics. The entire inscriptive system, reaching from its first rudimental characters in the ad-je-da-tig, or grave-board, to the extended scroll of bark, covered with the secret arts of their magicians, jossakeeds, and prophets, derived a new interest from this feature. Much comparative precision was imparted to interpretations in the hands of the initiated, which before, or to others, had very little. An interest was thus cast over it distinct from its novelty; and, in truth, the entire pictorial system was invested with a character of investigation, which promised both interest and instruction.

It has been thought that a simple statement of these circumstances would best answer the end in view, and might well occupy the place of a more formal or profound introduction. In bringing forward the elements of the system, after much reflection, it is thought, however, that a few remarks on the general character of this art may not be out of place: for, simple as it is, we perceive in it the native succedaneum for letters. It is not only the sole graphic mode they have for communicating ideas, but

it is the mode of communicating all classes of ideas commonly entertained by them. So considered, it reveals a new and unsuspected mode of obtaining light on their opinions of a deity, of the structure or cosmogony of the globe, of astronomy, of the various classes of natural objects, their ideas of immortality and a future state, and the prevalent notions of the union of spiritual and material matter. So wide and varied, indeed, is the range opened by the subject of pictography, that we may consider the Indian system of figure-writing as the thread which ties up the scroll of the Red Man's views of life and death; that it reveals the true theory of his hopes and fears, and denotes the relation he bears, in the secret chambers of his own thoughts, to his Maker. What a stoic and suspicious temper would often hold him back from uttering to another, and what limited language would sometimes prevent his fully revealing, if he wished, symbols and figures can be made to represent and express. The Indian is not a man prone to describe his god, personal or general, but he is ready to depict him by a symbol. He may conceal, under the figures of a serpent, a turtle, or a wolf, wisdom, strength, or malignity; or convey, under the picture of a sun, the idea of a Supreme, All-seeing Intelligence. But he is not prepared to discourse upon these things. What he believes on this head he will not declare to a white man or a stranger. His happiness and success in life are thought to depend upon the secrecy of that knowledge of the Creator and his system, in the Indian view of benign and malignant agents. To reveal this to others, even to his own people, is, he believes, to expose himself to the counteracting influence of other agents known to his subtle scheme of necromancy and superstition, and to hazard success and life itself. This conduces to make the Red Man eminently a man of fear, suspicion, and secrecy. But he cannot avoid some of these disclosures in his pictures and figures. These figures represent ideas — whole ideas, and their juxtaposition or relation on a scroll of bark, a tree, or a rock, discloses a continuity of ideas. This is the basis of the system.

Picture-writing is indeed the literature of the Indians. It cannot be interpreted, however rudely, without letting one know what the Red Man thinks and believes. It shadows forth the Indian intellect, standing in the place of letters for the *unishinaba*.[1] It shows the Red Man, in all periods of our history, both as he *was* and as he *is*; for there is nothing more true than that, save and except the comparatively few instances where they have truly embraced experimental Christianity, there has not been, beyond a few customs such as dress and other externals, any appreciable and permanent change in the Indian character since Columbus first dropped anchor at the Island of Guanahana.

[1] A generic term, denoting the common people of the Indian race.

2. Extreme Antiquity of Pictorial Notation.

Antiquity of the Art of Pictorial Writing; — Its general use amongst the Oriental Nations; — its connection with Idolatry; — the multiplicity of its Symbols, and its peculiarities as a System of communicating Ideas. — Its advance, in the progress of Nations, into the Hieroglyphic, the Phonetic, and the Alphabetical Mode. — Consideration of the Egyptian Systems of Hieroglyphics.

Picture-writing was the earliest form of the notation of ideas adopted by mankind. There can be little question that it was practised in the primitive ages, and that it preceded all attempts both at hieroglyphic and alphabetic writing. It is impossible to think of a time when man had not the faculty and disposition to draw a figure. The very power of imitation, implanted in the mind, implies it. The first track of an animal on the sand, the very shadow of a tree on the plain, would suggest it. The figure of an animal would be the symbol for the animal; and that of a man, for a man. A bow or a spear drawn in the hand of the latter, would be the natural symbol for an act. Thus actual objects, and actual deeds, past or future, would at once be symbolized. Was man ever in a condition not to accomplish this? Even supposing that he was created a barbarian, and not a civilized or industrial being, which would be adverse to all sacred authority, he would not long wait to compass this simple attainment. Here, then, is the first element of transmitting thought. A bow and arrow, a spear and club, a sword and javelin, were no sooner made than they were employed as symbols of acts: for next to action itself, is the desire of perpetuating the remembrance of the act, however rudely or imperfectly it may be done.

All arts and inventions are but the monuments of pre-existing thought. They embody, in wood, iron, or other materials, forms which had been pre-conceived, and thus depict the involutions and inventions of the mind. There is nothing new in this general principle of depicting objects, whether it be done by pigments, or represented in the solid realities of wood or stone. The mind itself, so far as related to its natural powers, was as fully endowed with the power of induction and analogy in the first, as in the last ages; and those are quite mistaken, who, with respect to the common arts and wants of life, suppose that the earlier ages were lacking in ingenuity. Industrial labors were performed with far more perfection at an early day than is generally supposed, as all must admit who have searched into the history and antiquity of cutting gems, of mosaics, pottery, metallurgy, and other early-noticed arts. How far representations by pictures and figures kept pace with inventions, we are left in a great measure to infer. We only perceive that some of the elements of a pictorial system were very ancient. Idolatry itself had its rise in this system, and it is only from the denunciations on this head, contained in the Scriptures, that we are histori-

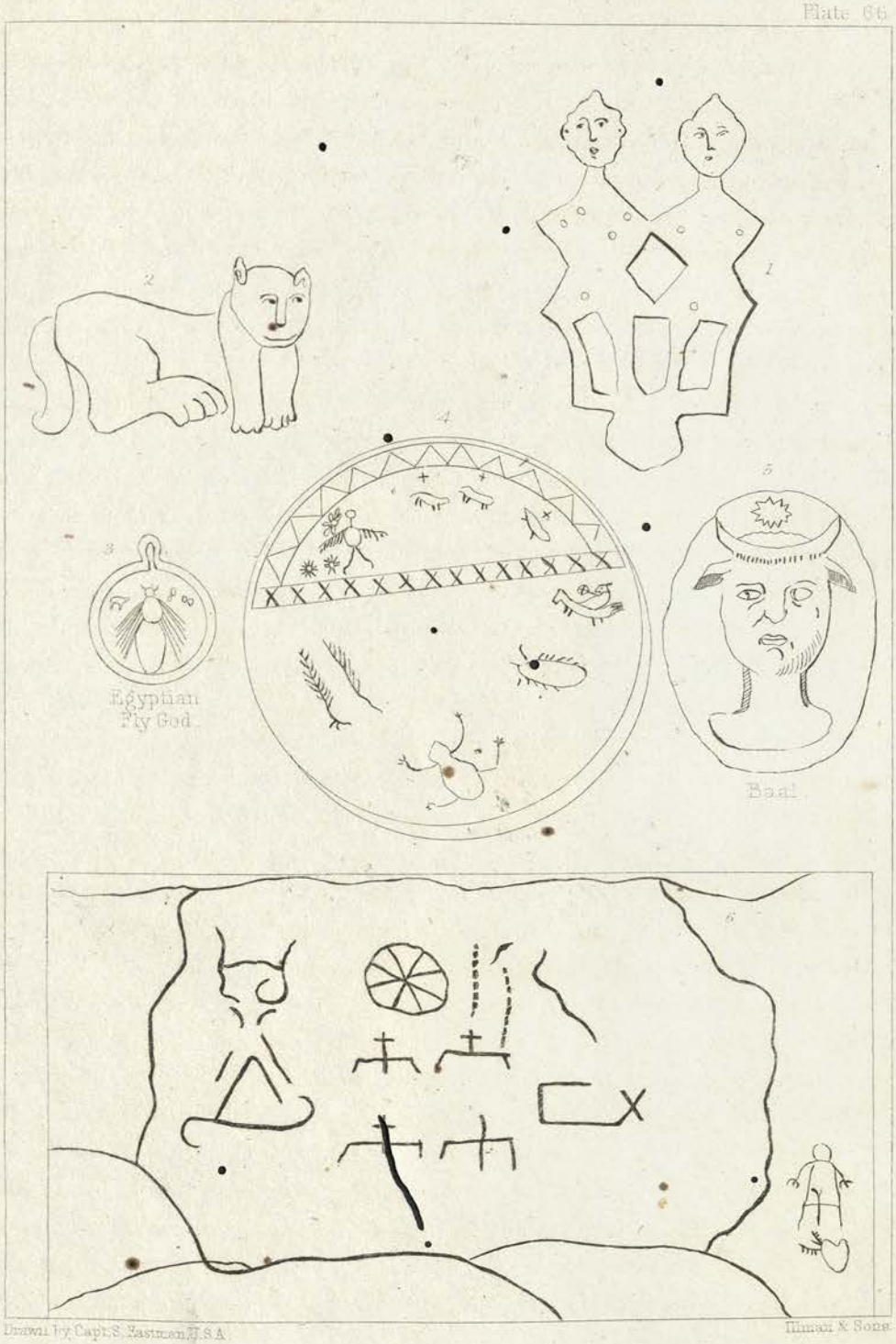
cally apprized of the early existence of the art, both in its form of images and of symbolic devices.

One of the most obvious devices of the primitive ages, in picture-writing, would appear to have been to leave a personal device or mark, to stand as the sign of a name; and hence we see that seals and "signets" were used long before letters.[1] To mark public transactions, heaps of stones were erected. This was probably the type and origin of the rage for pyramids, to which the early nations so long directed their efforts, and by which they sought to perpetuate their fame and the memory of their power. It is owing, indeed, to this trait of raising massive structures of earth and stone, towering to the skies, that we owe the preservation of our best and most ancient evidences of the pictorial, hieroglyphic, and inscriptive arts. Traces of these arts are found on the oldest existing monuments in the world. Outlines of animals, and things rudely drawn, are yet to be seen on the bricks of Babylon. The valley of the Nile is replete with evidences of the more advanced stages of this art, in which the simple pictorial gave way to the true hieroglyphic, and finally to the phonetic. Among the most ancient forms of inscription, which are now proved to have been provided with an alphabetic key, the ancient arrow-headed character of Persia may be adduced. German research has mastered, so far as the subject permits, the inscriptions of the Mokah-Wadey, near Mount Sinai. Important advances have been made in the recovery of the Etruscan language and alphabet. The gradation between a heap of stones, a barrow, a mound, a teocalli, and a pyramid, are not more marked as connected links in the rise of architecture, than are a representative figure, an ideographic symbol, a phonetic sign, and an alphabetical symbol, in the onward train of letters.

But however symbols and figures may have connected their existence with the early monuments of mankind, there is no branch of the representative or pictorial art in which they led to such deplorable moral results, as in the form and expression which these figures anciently gave to idolatry. If letters may be called the language of Christianity, picture-writing is emphatically the language of idolatry. It filled the human mind with gross material objects of veneration. It put the shadow for the substance; and having given distinct form to the idea of a deity, the devotee was not long in attributing to the form all power and honor that pertained to the deity itself. Every class of nature put in its claims as the representative of God; and it is no wonder that a calf, a plant, an insect, a bird, and other images were employed. Two of the most ancient forms of this kind are found in the following representations of Baal, and the Egyptian Fly-God, both of which are taken from ancient coins. (See Plate 66, Figures 3 and 5.)

Man had but just emerged from the hands of his Creator — he had scarcely passed

[1] Genesis.



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from his early pastoral seats, when he began to materialize the divine idea. What he could not see, eye to eye, he did not long believe. Symbols and images were substituted, and filled the Pagan world. All knowledge of the true God was forgotten. And God found himself in a position requiring a new revelation of himself to men. Is there any better proof that idolatry had filled the world and corrupted the race? In this declension what agent can we name so powerful in its influences as the rude symbols and images of antiquity? That the art thus became, very early, one of the chief means of propagating idolatry, we may infer from the solemn prohibition of it in the decalogue. The early employments and amusements of mankind,— perhaps the very circumstances of the fine climate, soil, and spontaneous productions of the latitudes of the human family, led them to the adoption of gross material habits of thinking. Accustomed only to see and hear the great phenomena of the elemental world, they pictured out the fancied forms of the supernatural power under a thousand shapes. Infinity itself was soon the only limit to those fanciful creations. Every class of priests and magii formed a god of its own. Nor were they limited to gods of a general character.

Not satisfied with fixing the exhibition of divine power in the image of an ox, an ibis, or a cat, the oriental nations at once assigned to its operations a locality; and thus every nation and every country was furnished with a local god, and each country with its own god. How absorbing, degrading, and mentally besotting this idea became — how completely it took away from the Creator the ascription of power to himself, while it placed it in material or brutal objects, and thus destroyed the responsibility of man to his Maker, the tremendous denunciations of Sinai may satisfactorily serve to explain. We allude to this passage in the Pentateuch, as the only authentic historical proof of so early a date. But it is corroborated by the universality of the practice, as proved by ancient monuments, and as traced among barbarous tribes, at the present day. If all Asia and all Africa were overrun by it, so was all America when first discovered. And in every place where the art exists, between the Arctic and Antarctic poles, we see it employed agreeably to the ancient notions; not to sustain and uphold, but to undermine and destroy the true idea of the Divinity.

It is thus perceived, that the mode of communicating ideas, by the use of symbols of some sort, and with a more or less degree of perfection, was an early and a common trait of the human race. Alphabetic characters, it is thought, were known in Asia about 3317 years before the discovery of America. We must assign much of the prior era of the world to picture-writing and hieroglyphics. It is proposed to inquire how far, and to what extent, the pictographic art was known to, or practised by, the American tribes.

Idle, indeed, would be the attempt, at this day, to look for the origin of the American race in any other generic quarter than the eastern continent. *When* they came hither? *how* they came? and *why* they came? have been vainly inquired. But

we may, it is conceived, employ the pictorial art to aid in denoting internationalism. If we take the invention of letters, as the era of their departure from the East, either with its Egyptian or Grecian date, the Red Man came hither before this era, or, at least, before his ancestors were participants in the knowledge. Letters were used about 1822 to 2000 years before the Christian era. As he brought no such knowledge, it is inferable that he departed before that era. But he had the pictorial system—he could inscribe figures and devices, in various ways, and this at least, is known, that he early developed the art in the Aztec race, and carried it to its utmost perfection.

In what respects, we may inquire, was this ancient Toltecan art superior to, or different from, the pictography of the United States' tribes? Both are ideographic. Both are mnemonic to a large extent. Both appeal strongly to the power of the association of ideas by symbols. Both require interpretation by the system of ideography. Neither presents a method for the preservation of sounds. Proper names of men and animals are preserved by representative figures and drawings, and may be recalled so long as the language itself is not extinct.

With respect to the North American pictography, it may be inquired, is it universal, or confined to particular tribes?

What is the character of these devices, compared with analogous inscriptions, among the Mongolian and the wild Tartar, and the Nomadic races of Asia, and other parts of the globe? Are they mere representative symbols, or hieroglyphics? Is there more than one kind of ideographic device, or do the Indian priests and the common people use the same? Are there any characters that may be deemed hieratic? If the native jossakeeds, or medicine-men, use a more mystical method, in recording their songs, or arts, how is this denoted? Finally, is there sufficient fixity and uniformity in the application and connection of the symbols, among our forest tribes, to permit the system to be explained?

It will be evident, from these suggestions, that a new, and hitherto untrodden *field* of inquiry, with respect to these tribes, is hereby opened. The early history of the race is such a blank—we are, in truth, so completely at a loss, for anything of a satisfactory character reaching beyond the close of the 15th century, that it behooves us, in the spirit of cautious research, to scrutinize every possible source of information. The oblivion of centuries rests upon this branch of the human family. By their physical traits they are clearly identified with some of the ancient leading stocks of Asia. But they appear to have broken off, and found their way hither, before the dawn of authentic profane history,[1] probably, as we have indicated, before the invention of letters. A few incidental notices in the early annals of Grecian literature, are all that remain, of ancient tradition, prior to Herodotus, to denote the

[1] The era of Herodotus is 413 B. C.

probability of such a separation, at a remote epoch. But is this obscurity destined to be perpetual? Can it not, at least, be mitigated by a study of this ante-alphabetic branch of their antiquities? Are there no strong and undeniable coincidences, which are recorded in these pictographic symbols, between the mythology of the eastern and western hemispheres? Is there not, at least, an identity in the mode of recording idolatrous belief?

Are we prepared to conclude that the examination of their monumental ruins, in both divisions of the continent, does not furnish satisfactory evidences of identity in the general character of some elements of their astronomical knowledge, arithmetic, and geometry, as shadowed out in the Toltec and Aztec race? So in their physiology and cast of mind we perceive very striking points of similarity, from south to north, not only in their personal generic features and external traits, but also in proportion as we scrutinize the facts, in the mental habits and the intellectual structure of the Red Men of Asia and America. There is, in both, a well-developed cast of character, which is oriental, relates to the early seat of human origin, and cannot be referred to the secondary and re-produced stocks of Europe. There is nothing in the manner in which this race met and opposed the early colonists, or have, subsequently, prepared to encounter their fate, which admits a serious comparison with the purpose, forecast, and perseverance, which mark the Magyer, or any variety of the man of Europe. We must look to another quarter of the globe for our points of mental affiliation.

One of the hitherto unused evidences of this has been brought to our notice, as we apprehend, in the specimens submitted in 1825, and in 1839, of their oral imaginative propensities and lodge lore, consisting of extravagant fictions, which reveals itself in their domestic oral tales and legends.[1] We cannot be sure that, where there are so many points of similarity in the matters noticed, others may not be found, having still higher claims to attention. It is believed that there is, yet un-exhumed from their teocalli and simple cemeteries and isolated graves, objects of art and ingenuity, containing evidences which will shed important light on the era, or eras, of their primary separation from the Asiatic continent, and the islands of Oceanica. If they brought to the western hemisphere the knowledge of observing the solar cycles, and of measuring their time and adjusting their year thereby, as discoveries in Mexico and Peru denote, it is hardly probable they were behind-hand in other attainments of the same epoch. How is it that they had a cycle of 60 years, or a double cycle of 120 years, corresponding to the Chinese? How did the Mexicans adjust their year to exactly 365 days and 6 hours? We may, at least, suppose them to have been conversant with the ancient pictorial signs of the Zodiac, if not with the early Chinese mixed, or impure hieroglyphic, method of notation.

But if oral fiction be a test of mind in barbarous nations, pictography appears to be

[1] Vide Algic Researches.

equally so. In order to fix a standard of comparison for the American ideographic symbols, it will be proper to advert to the state of these arts, as they existed in other parts of the globe, and particularly in Egypt — where hieroglyphic literature was so extensively cultivated, and brought to a high degree of perfection, at an early epoch, and before the invention of letters. Letters, if we take the ordinary chronological accounts, were invented in Egypt, in 1822, B. C. This is assuming the truth of their discovery by Memnon, and places the event 331 years before the era of the Exodus. As two systems of recording ideas, of very different merit and principles, cannot be supposed to have existed long together, in a state of equal prosperity, but the better would absorb and supplant the poorer, it may be affirmed that hieroglyphics began to decline for many centuries before the Christian era. This, at least, is certain, that Moses, say in the year 1491 B. C., was well versed in the use of an alphabet of sixteen consonants, so that he recorded, as with the "pen of a ready writer," the events which we ascribe to him. Theological critics have denied that the use of letters can be traced to an earlier date:[1] others contend for the elder theory of an uninspired invention.

Egypt was the great theatre of the hieroglyphic art; but it was an art destined to be forgotten. As if the physical darkness which once shrouded it at noon-day had been a type of its subsequent intellectual and moral degradation, the very knowledge of the system that once recorded thoughts in hieroglyphic language was obliterated for fifteen centuries. Letters, if they existed in Egypt at this epoch, appear to have taken their flight with the Hebrews. Knowledge was destined to be, in the end, inseparable from revelation. And when, after the rest of the world was generally enlightened, the spirit of research returned, with the French expedition to Egypt, in 1798, to the valley of the Nile, it found a land covered with monuments of forgotten greatness, and a people sunk in depths of comparative ignorance. It *is* supposed the mode of hieroglyphic writing was not laid aside until the third century, A. D. An earlier opinion, generally affirms that the hieroglyphic enchorial characters had ceased to be employed after the Persian conquest of Cambyses, in 525 B. C. If the Egyptians, on the invasion of the French, were found to have substituted the Arabic alphabet in place of the phonetic-hieroglyphic, and installed Mahomet's system in place of the ibis, the calf, and the cat, they had completely forgotten the event of this mutation in their literature, or that the phonetic symbols had ever been employed by them. The discovery was made by Europeans, and made alone through the perpetuating power of the Greek and Roman alphabet.

The first travellers who went to Egypt, during the latter half of the eighteenth century, did little more than wonder. They told us of pyramids, and ruined cities, and monuments covered with hieroglyphics; but the latter remained unread. Volney,

[1] See Dr. Spring's Obligations to the Bible.

Pococke, Clarke, and Bruce, imparted no other information. Kircher, who undertook it, in a work of elaborate pretence, wrote a hieroglyphic romance. It has long been condemned. The first traveller of a different stamp was Belzoni. But it is not my design to recite, in detail, the discoveries of the most distinguished visitors to the banks of the Nile. It remained for the scientific corps who attended Bonaparte in his invasion of Egypt, to take the first steps, and prepare the way for the present discoveries. Amongst the monuments which were figured in "Denon's Description of Egypt," was the Rosetta stone. This fragment, which I examined in the British Museum in 1842, was dug up on the banks of the Nile by the French, in erecting a fort, in 1799. It is a sculptured mass of black basalt, bearing trilingual inscriptions in the hieroglyphic, the demotic, and the ancient Greek characters. Copies of it were multiplied, and spread before the scientific minds of England and the Continent, for about twenty years before the respective inscriptions were satisfactorily read. It would transcend my purpose to give the details of the history of its interpretation; but as it has furnished the key to the subsequent discoveries, and serves to denote the patience with which labors of this kind are to be met, a brief notice of the subject will be added. The Greek inscription, which is the lowermost in position, and, like the others, imperfect, was the first made out by the labors of Dr. Heyne of Germany, Professor Porson of London, and by the members of the French Institute. They, at the same time, demonstrated it to be a *translation.*

The chief attention of the inquirers was next directed to the middle inscription, which is the most entire, and consists of the demotic, or enchorial character. The first advance was made by De Lacy, in 1802, who found, in the groups of proper names, those of Ptolemy, Arsinoe, and others. This was more satisfactorily demonstrated by Dr. Young, in 1814, when he published the result of his labors on the demotic text. These labors were further extended, and brought forward in separate papers, published by him in 1818 and 1819, in which he is believed to have shed the earliest beam of true light on the mode of annotation. He was not able, however, to apply his principles fully, or at least without error, from an opinion that a *syllabic* principle pervaded the system. He carried his interpretations, however, much beyond the decyphering of the proper names. It was the idea of this compound character of the phonetic hieroglyphics, that proved the only bar to his full and complete success; an opinion to which he adhered in 1823, in a paper in which he maintains, that the Egyptians did *not* make use of an alphabet to represent elementary sounds and their connection, prior to the era of the Grecian and Roman domination. Champollion the Younger, himself entertained very much the same opinion, so far, at least, as relates to the phonetic signs, in 1812. In 1814, in his "Egypt under the Pharaohs," he first expresses a different opinion, and throws out the hope, that "sounds of language and the expressions of thought," would yet be disclosed under the garb of "material pictures." This was, indeed, the germ in the

thought-work of the real discovery, which he announced to the Royal Academy of Belles Letters at Paris, in September, 1822. By this discovery, of which Dr. Young claims priority, in determining the first nine symbols, a new link is added in the communication of thought by signs, which connects picture and alphabet writing. Phonetic hieroglyphics, as thus disclosed, consist of symbols representing the sounds of first letters of words. These symbols have this peculiarity, and are restricted to this precise use: that while they depict the ideas of whole objects, as birds, &c., they represent only the alphabetic value of the *initial* letter of the name of these objects. Thus the picture may, to give an example in English, denote a man, an ox, an eagle, or a lotus; but their alphabetical value, if these be the words inscribed on a column, would be respectively, the letters M. O. E. L. These are the phonetic signs, or equivalents for the words. It is evident that an inscription could thus be made, with considerable precision, but not unerring exactitude, and it is by the discovery of this key, that so much light has been, within late years, evolved from the Egyptian monuments.

It may be useful, in this connection, to bear in mind two facts, namely, that the discovery aims at greater accuracy and precision, than it has attained; and that, the result, striking and brilliant as it confessedly is, is the accumulation of the patient research of many years, and a plurality of intellects. Without the accidental discovery of the Rosetta stone, containing the trilingual inscription, it is doubtful whether the system would have ever been guessed at. And here is one, and we think by far the greatest benefit, which the world owes to the French invasion of Egypt. It has been seen, that the first step to an interpretation, was the detection of the proper names, as disclosed by the Greek copy, coupled with the linguistical conclusion arrived at by Heyne. Scholars perceived that this Greek text must be a "*translation.*" This hint gave the impulse to research. What was translated must necessarily have had an original.

The next step was taken by Quatremere, who proved the present Coptic to be identical with the ancient Egyptian. To find this language, then, recorded in the hieroglyphics, was the great object. It is here that the younger Champollion exercised his power of definition and comparison. By the pre-conception of a phonetic hieroglyphical alphabet, as above denoted, he had grasped the truth, which yet lay concealed, and he labored at it until he verified his conceptions. It is thus that a theory gives energy to research; nor is there much hope of success without one, in the investigation of the unknown. Columbus had never reached America, without a theory. Nor did this investigation want the additional stimulus of rivalry. The discoveries of Dr. Young, and the injudicious criticisms and wholesale praises of the British press, (particularly the London Quarterly,) of his papers on the hieroglyphic literature of Egypt, were calculated to arouse in France and Germany a double feeling of rivalry. It was not only a question between the respective archæological merits

of Dr. Young and M. Champollion; it was also a question of national pride between England, France, and Germany. And, for the first time in their fierce and sanguinary history, hieroglyphics were the missives wielded. Victory decided in favor of Champollion, as displayed in the triumph of the pure phonetic method elucidated in his "Précis du systéme hiéroglyphiques des anciens Egyptiens," published in 1824.

It is a striking feature in hieroglyphical phonetic writing, and the great cause of imprecision, that its signs are multiform, often arbitrary, and must be constantly interpreted, not only with an entire familiarity with the language of the people employing them, but with their customs, habits, arts, manners, and history. All who have studied the Egyptian hieroglyphic literature, have experienced this. The number of phonetic synonyms, or *homophanous signs*, in the phonetic alphabet, has been increased, at the last dates, to 864. Of this number, 120 are devoted to the human figure, in various positions, and 60 to separate parts of the body. 10 represent celestial bodies; 24, wild, and 10, domestic quadrupeds; 22, limbs of animals; 50, birds and parts of birds; 10, fishes; 30, reptiles, and portions of reptiles; 14, insects; 60, vegetables, plants, flowers, and fruits; 50, fantastic, arbitrary forms; and the remaining 404, artificial objects. Nor is it supposed that this is the full extent of the phonetic signs.

Homophons have been added to the list by every new discoverer, and the best results which are now predicted for the alphabet, denote that the round number of 900 is expected to comprise all the various signs. Where an alphabet is so diffuse, there must be danger of error and imprecision. We do not fall in with the too-sweeping conclusions of some erudite critics, against the general value of the principles and results; which, however, must be received with abatements. It is sufficient to bear in mind, as a reason for caution, that the interpretations of different minds vary; and that Rossolini and Champollion did not coincide. There is a manifest tendency, at the present day, to over-estimate the civilization, learning, and philosophy of the Egyptians and Persians in these departments, chiefly from hieroglyphic and pictorial records. If I mistake not, we are in some danger of falling into this error, on this side of the water, in relation to the character of the ancient Mexican civilization. The impulsive glow of one of our most chaste and eloquent historians, gives this natural tendency to our conceptions. The Aztec semi-civilization was an industrial civilization; the giving up of hunting and roving for agriculture and fixed dwellings. But we must not mistake it. They built teocalli, temples, palaces, and gardens; but the people lived in mere huts. They were still debased. Woman was dreadfully so. The mind of the Aztecs, while the hand had obtained skill and industry, was still barbaric. The horrific character of their religion made it impossible it should be otherwise. Civilization had but little affected the intellect, the morals not at all. They commemorated events by the striking system of picture-writing; but there is strong reason to suspect, since examining the principles of the

North American system, as practised by our medas and jossakeeds, that the Mexican manuscripts were also constructed on the *mnemonic principle*, and always owed much of their value and precision to the memory of the trained writers and painters. If these occupied, before the law-chiefs of Montezuma, the relative position of clerks of courts and recorders, as some of the picture-writings preserved by Hackluyt denote, these interpreters of the national rolls relied greatly on memory. Conventional signs had done much, but the painted record still required these verbal explanations which a knowledge of the system only could supply.

3. Elements of the Pictorial System.

The Toltec and Aztec system of Picture-Writing, compared with the North American;—its general agreement—its peculiar traits and common figurative system of the United States Tribes.—Devices from a Tree on the Mamakagon River, Wisconsin.—Drawing from the Upper Mississippi, denoting a Peace-Mission.—Signs drawn on Grave-Posts.—Sepulchral honors of the Chiefs Wabojeeg, and Babasekundabee.

There has been no explanation of the Mexican system of Picture-Writing, by which it can be understood as a system, if we except the mode of distinguishing the day, the division of the cycle called Tlalpilli, and the cycle itself. By the devices for what may be designated the surnames of families or clans, which our United States tribes call Totems, the names of reigning caciques and dynasties were also preserved. Figurative or representative signs described events. The drowning of distinguished men was represented by a boat upsetting on the water. Maces, arrows, flowers, quadrupeds, birds, and other animate and inanimate objects, were employed as symbols. Compartments and colors gave uniformity and attraction to the series of signs, many of which were derived from their fine tropical vegetation and phenomena. In this respect, and in the mode of denoting chronology, the Mexican picture-writing was in advance of the ruder form of our pictography. The latter is exclusively ideographic—consisting of a series of signs for whole ideas and sentences—the chief or turning words of which are typified, as affording aid to the memory. The signs are drawn from every department of nature—from the earth, the waters, and the atmosphere. With a spiritual agency—a subtle polytheism pervading all space, these signs are supposed to effect and maintain relations to these objects of a mysterious and miraculous character. A hunter has selected his personal spirit or manito from the animal creation, and whenever he encounters that object, be it bird or beast, in the forest, he regards it in the light of a protector, or harbinger of luck. Even its tracks, if it be a quadruped, or its flight, if it be a bird, are sufficient to animate his

highest hopes or fears. A meta or priest, and a jossakeed, or a medical man, believes himself to have triumphed by his skill, and is desirous, by his figurative or representative signs, to perpetuate the knowledge of his success among his countrymen. Fame is as powerful a motive to him as to the man of science, letters, or religion, in civil life. He believes in the truth and efficacy of his system of polytheism, of spirit-power, of incantations, of medical magic, of mythology, of his wild forest religion. And that the observance of these rites, offerings, and ceremonies, in each department, is indissolubly connected with the issues of life and death. Stronger motives civilization and Christian hope could not supply. This will denote the faith with which he practises his pictography. For their pictographic devices the North American Indians have two terms, namely, *Kekeewin*, or such things as are generally understood by the tribe; and *Kekeenowin*, or teachings of the *medas* or priests, and *jossakeeds* or prophets. The knowledge of the latter is chiefly confined to persons who are versed in their system of magic medicine, or their religion, and may be deemed hieratic. The former consists of the common figurative signs, such as are employed at places of sepulture, or by hunting or travelling parties. It is also employed in the *muzzinábiks*, or rock-writings. Many of the figures are common to both, and are seen in the drawings generally; but it is to be understood that this results from the figure-alphabet being precisely the same in both, while the devices of the Mugamoons, or medicine, wabino, hunting, and war songs, are known solely to the initiates who have learned them, and who always pay high to the native professors for this knowledge. Shawunipenais, or the South-bird, a member of the Chippewa tribe, told me, (after he had become a member of the Baptist Church,) that he had paid exorbitant prices,—such as a gun for a song, in learning the magical hunting songs. They were taught to him from the devices on scrolls of bark. He added, that he had been a long time in learning them; that the information was communicated secretly; and that, whenever he had mastered the songs, which contained mysterious allusions, he fully understood, and could draw the devices.

The subjects to which the North American Indian applies his pictographic skill, may be regarded as follows, namely:

1. KEKEEWIN.
   - A. Common signs . . . . . Travelling.
   - B. Adjidátigwun . . . . . Sepulture.

2. KEKEENOWIN.
   - C. Medáwin . . . . . Medicine.
   - D. Minor Jesukáwin . . . . . Necromancy.
   - E. Wábino . . . . . Revelry.
   - F. Keossáwin . . . . . Hunting.

G. Higher Jesukáwin . . . . . Prophecy.
H. Nundobewunewun . . . . . War.
I. Sageáwin . . . . . Love.
K. Muzzinábikon . . . . . History.

Some observations on each of these topics may be made.

1. Common Kekeewin, or Mode of Writing by Representative and Symbolical Pictures.

A. The following pictograph is transcribed from the sides of a blazed tree, of the species *Pinus resinosa*, found on the banks of the Namakagun, a tributary of the River St. Croix, of the Upper Mississippi, at a spot where I landed in the month of August, 1831. (See A, Plate 49.)

The purport, as explained by an interpreter well versed in both this art and the language and customs of the Chippewas, may be given in few words. Figure 3, on the right, is the totem of a hunter, who had encamped at that spot. It represents a fabulous animal, called the copper-tailed bear. The two parallel lines beneath it, (figure 4,) curved at each end, represent the hunter's canoe. The next sign, (figure 1,) on the same side, below, is the totem of his companion, the mizi, or cat-fish, the parallel lines beneath (figure 2) also representing his canoe. The upper figure, 5, on the left, represents the common black bear; the six lower devices, figures 6, 7, 8, 9, 10, and 11, denote six fish of the cat-fish species. The interpretation is this: The two hunters, whose totems were cat-fish and copper-tailed bear, while encamped at the spot, killed a bear, and captured the expressed number of cat-fish in the river. The record was designed to convey this piece of information to their people and kinsfolk who should pass the locality. The state of society among them rendered such information interesting; it was as much so to them, perhaps, as the generality of the information of a personal character which is circulated by our diurnal press; and the fact of the record itself may be regarded as a proof that the system of the Kekeewin was generally understood.

The scroll containing this inscription (See A, Plate 48,) was obtained above St. Anthony's Falls, on a public expedition in 1820, which has been alluded to in a prior place. It consisted of white birch bark, and the figures had been carefully drawn. Number 1, denotes the flag of the Union; Number 2, the cantonment, then recently established at Cold Spring, on the western side of the cliffs, above the influx of the St. Peters. Number 4 is the symbol of the commanding officer, (Colonel H. Leavenworth,) under whose authority a mission of peace had been sent into the Chippewa country. Number 11 is the symbol of Chakope, or the *Six*, the leading Sioux chief, under whose orders the party moved. Number 8 is the second chief, called Wamade-tunka, or the Black Eagle. The symbol of his name is Number 10. He has 14 lodges.

A

INSCRIPTION ON A TREE OF THE SPECIES PINUS RESINOSA ON THE NAMAKAXOON RIVER, TRIBUTARY TO THE ST. CROIX.

B

FUTELAR SPIRITS OF CHUSCOTTIE, PROPHET OF MICHIGAN, 1824.

Drawn by [illegible]

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Captain Douglas, who had begun the study of this "bark-letter," as it was called, thought this symbol denoted his descent from Chakope. Number 7 is a chief, subordinate to Chakope, with 13 lodges, and a bale of goods (Number 9), which was devoted, by the public, to the objects of the peace. The name of Number 6, whose wigwam is Number 5, with 13 subordinate lodges, was not given. The frame, or crossed poles of the entire 50 lodges composing this party, had been left standing on the high, open prairie on the west bank of the Mississippi, above Sauk River, and immediately opposite the point of Hornblende Rocks, which the French call the Two Rocks. A high pole, split so as to receive the scroll, was placed at the head of the camp, conspicuous to all who should pass; and its sight actually produced a shout from Babesacundabe and a delegation of Chippewas, who accompanied him on an errand of peace from the sources of the Mississippi.

To these examples of the use of pictographic writing to subserve the purpose of information, in travelling and in hunting, I add the following pictograph respecting known historical events. It was transcribed from a tree on the banks of the Muskingum River, Ohio, about 1780.[1] The bark of the tree had been removed about twelve inches square, to admit the inscription. The characters were drawn with charcoal and bear's oil. (See B, Plate 47.)

It is known, historically, that, after the conquest of Canada, 1758–59, the western Indians, who adhered to the French interest, formed an extensive confederacy for retaking, simultaneously, all the military posts west of the Alleghanies. This confederacy, which was headed by the celebrated chief Pontiac, was so well ordered and planned that nine out of the twelve small stockaded garrisons, held by the English troops, were actually surprised and taken; and they were only resisted by the superior works of Pittsburg and Detroit. It was not till the year 1763–64 that these formidable disturbances were quelled, and the authority of the British crown finally established among the dissatisfied tribes.

The inscription relates to these events. It depicts the part borne in this confederate war by the Delawares of the Muskingum, under the conduct of the noted chief Wingenund.

Number 1 represents the eldest and main branch of the Delaware tribe, by its ancient symbol, the tortoise.

Number 2 is the totem, or armorial badge of Wingenund, denoting him to be the actor.

Number 3 is the sun. The ten horizontal strokes beneath it denote the number of war-parties in which this chief had participated.

Number 4 are men's scalps.

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[1] Archæologia, or Miscellaneous Tracts relating to Antiquity; published by the Society of Antiquarians of London, Vol. vi., 1782, page 159.

Number 5, women's scalps.

Number 6, male prisoners.

Number 7, female prisoners.

Number 8, a small fort situated on the banks of Lake Erie, which was taken by the Indians in 1762, by a surprise.

Number 9 represents the fort at Detroit, which, in 1763, resisted a siege of three months, under the command of Major Gladwyn.

Number 10 is Fort Pitt, denoted by its striking position on the extreme point of land at the confluence of the Alleghany and the Monongahela rivers.

Number 11 denotes the incipient town near it. The eleven crosses or figures, arranged below the tortoise, denote the number of persons who were either killed or taken prisoners by this chief. The prisoners are distinguished from the slain by the figure of a ball or circle above the cross-figure denoting a head. Those devices without this circle are symbols of the slain. But four out of the eleven, appear to have been women, and of these, two were retained as prisoners. It appears that but two of the six men were led into captivity. The twenty-three nearly vertical strokes, at the foot of the inscription, indicate the strength of the chieftain's party. The inclination denotes the course they marched to reach the scene of conflict. This course, in the actual position of the tribe, and of the side of the tree chosen to depict it, was northward. As one of the evidences which show the order and exactitude of these rude memorials in recording facts, it is to be observed that the number of persons captured or killed, in each expedition of the chief, is set on the left of the picture, exactly opposite the symbolical mark of the expedition. Thus, in his first war-party, he took nothing; in the second, he killed one man, and took his scalp — the sign is ideographic of one; in the third, he killed a male and female, and took a female prisoner; in the fourth, he took a male prisoner; the fifth, he accomplished nothing; the sixth, he took a male prisoner. Between this and his next expedition some years elapsed, as denoted by the space. In the seventh, he took a female prisoner; *the* eighth, he killed a man; the ninth, a woman; the tenth, a man.

Here is a large amount of information conveyed by 51 symbolic or representative characters. Its interpretation is due to a fellow-tribesman of the successful warrior; the noted Delaware chief, Captain White Eyes, who was acquainted with the circumstances, knew Wingenund, had participated in the incidents of the war, and was well versed in this mode of pictorial writing.

These facts have been brought forward, as denoting a starting point in the inquiry.

B. ADJEDATIGWUN.[1] The veneration of the Indian tribes for their dead, is well

[1] The import of the thought of this term is given by the expression, *death-stick.* It is derived from the verb adjidj, to reverse, meaning that the totem of the person interred is reversed. As this totem is the symbol of

known. Piety and affection, respect and remembrance, may have more costly and splendid modes of obituary exhibition in civilized life; but it is questionable if there be more sincerity, more true regret, more unaffected sorrow, than there is often found among esteemed individuals of these simple bands. And if there be anything sacred, in a life of so much change, vicissitude, and temptation to degradation, as they have suffered, it is a sentiment of veneration for their dead. This is a public sentiment, which has often been evinced, and is known to have had force when they have parted with every species of landed possession, and even territory containing the last cherished spot of their simple sepulture. In such circumstances they have uniformly solicited much regard, and an undisturbed repose, for the bones of their dead. One of the great merits ascribed by the modern Indians to the era of the French supremacy in the land is, that Frenchmen never disturbed the places of their dead.[1] The cemeteries of the Indian dead were always placed in the choicest scenic situations their vicinage afforded; — on some crowning hill, or gentle eminence in a secluded valley. Airy or sylvan sites were always selected. Their taste in this respect has often been noticed and admired. They were deficient in mechanical skill, in wood and stone, but they have rarely been exceeded, perhaps never, by erratic tribes, in the kind care and decent enwrapment and interment of their deceased. Nothing that the dead possessed has ever been deemed too valuable to be interred with the body. The most costly dress, arms, ornaments, and implements, are deposited in the grave. Where the low state of these arts permitted no architectural display in their simple tombs and bark-cenotaphs, nothing was more natural than that they should heap piles of earth over the remains. In this manner, the spot could be marked and kept in remembrance long after their frail memorials of wood and bark, with their pictorial devices, had perished. This, it is thought, was the origin and cause of by far the largest number of the mounds and barrows which extend over so large an area of the western country, and which have been, from time to time, the subject of much, and (may we not add?) some very fanciful observation. That religious rites should connect themselves with these rude mausoleii, and be offered on their summits, was a not less natural than simple process, among such a people. It cannot be a subject of wonder, that, without a revelation of the "more perfect way" spoken of by the Apostle, these tribes should convert the altars of remembrance of their dead into altars of propitiation for the prosperity of the living. The most pertinent point of the inquiry here is, whether, in their efforts to perpetuate the memory of the name and acts of the dead,

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the person, the ideographic import is, that the deceased has been returned to the earth. Atig is the noun in this compound, denoting a tree, stick, board, or post. The termination in *wun*, is the plural.

The stick, or tabular piece of wood set at the head of a grave, is also sometimes called annameáwin, or *prayer stick*, a term which has been in use only since the introduction of Christianity. This term is applied only to the cross.

[1] Historical and Scientific Sketches of Michigan. Detroit, 1834. 1 vol. pp. 65.

they may not in some cases have inscribed their "hieroglyphics" (as they are improperly called) and figures upon them.

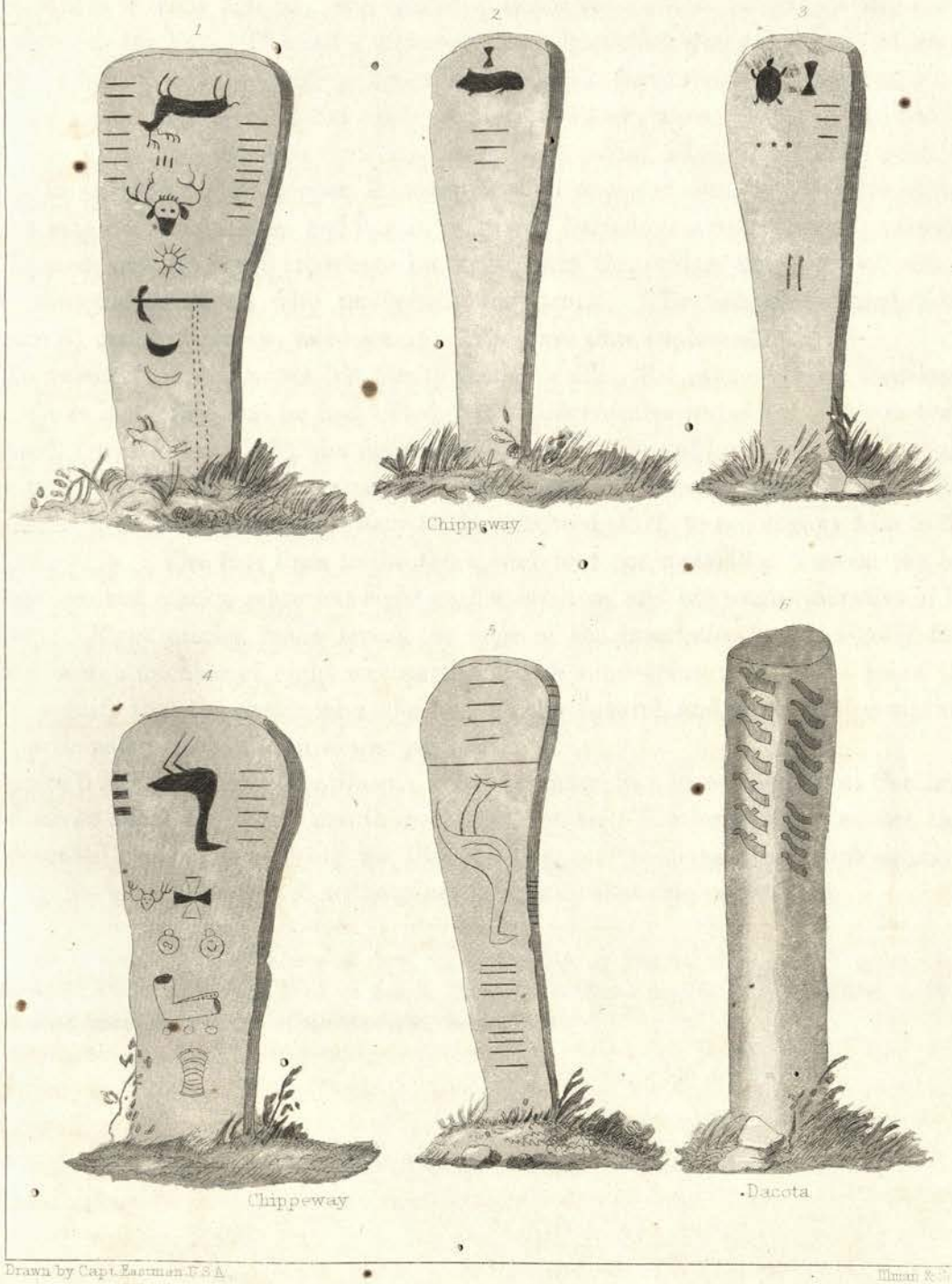
The most common and simple mode of the disposition of a dead body among these tribes, was, after wrapping it in the best garments, to inclose it, with every adjunct memorial, in outer wrappers of skins and bark, and, if possible, a wooden shell, variously made, and thus to inter it. Among the Sioux and western Chippewas, after the body has been wrapped in its best clothes and ornaments, it is then placed on a scaffold, or in a tree, where it remains until the flesh is entirely decayed; after which the bones are buried, and the grave-posts fixed. At the head of the grave a tabular piece of cedar, or other wood, called the adjedatig, is set. This grave-board contains the symbolic or representative figures which record, if it be a warrior, his totem; that is to say, the symbol of his family, or surname, and such arithmetical or other devices as serve to denote how many times the deceased has been in war parties, and how many scalps he has taken from the enemy; two facts, from which his reputation is to be essentially derived. It is seldom that more is attempted in the way of inscription. Often, however, distinguished chiefs have their war-flag, or, in modern days, a small ensign of American fabric, displayed on a standard at the head of their graves, which is left to fly over the deceased till it is wasted by the elements. Scalps of their enemies, feathers of the bald or black eagle, the swallow-tailed falcon, or some carnivorous bird, are also placed, in such instances, on the adjedatig, or suspended, with offerings of various kinds, on a separate staff. But the latter are super-additions of a religious character, and belong to the class of the ke-ke-wa-o-win-au-tig, (ante, Number 4.) The building of a funeral fire on recent graves, is also a rite which belongs to the consideration of their religious faith.

The following figures (Plate 50) will convey a just idea of this kind of pictographic record.

Number 1 is the adjedatig of Wabojeeg, a celebrated war-chief and ruler of his tribe, who died on Lake Superior, about 1793. He was of the family or clan of the addik, or American reindeer. This fact is symbolized by the figure of the deer. The reverse position denotes death. His own personal name, which was the White Fisher, is not noticed. The seven transverse marks on the left denote that he had led seven war parties. The three perpendicular lines below the totem, represent three wounds received in battle. The figure of a moose's head, relates to a desperate conflict with an enraged animal of this kind. The symbols of the arrow and pipe, are drawn to indicate his influence in war and peace.

Number 2 is the record of a hunter of the Mukwau or bear clan, who had been a member of three separate war parties.

Number 3 represents a chief who was of the tortoise totem, and has three marks of honor. The closed cross is here an emblem of death; the totem being drawn upright.



Drawn by Capt. Eastman U.S.A.

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No. 4 is the record of a noted chief of the St. Mary's band, called Shin-ga-ba-was-sin, or the Image-stone, who died on Lake Superior, in 1828. He was of the totem of the crane, which is alone figured. Six marks of honor are awarded to him on the right, and three on the left. The latter represent three important general treaties of peace which he had attended at various times.[1] Among the former marks are included his presence under Tecumseh, at the battle of Moraviantown, where he lost a brother.

A few years ago, Ba-bé-sa-kun-dib-a (man with curled hair), the ruling chief of Sandy Lake band, on the Upper Mississippi, died and was committed to his grave, after a long life of usefulness and honor. He was buried on a conspicuous elevation, on the east bank of the river, where his grave, and the ensign which waved over it, were conspicuous to all who navigated the stream. The following inscriptions, (Figure 5) and decorations, were set up. They are thus explained:

The reversed bird denotes his family name, or clan, the crane. Four transverse lines above it, signify that he had killed four of his enemies in battle. This fact was declared, I was informed, by the funeral orator, at the time of his interment. At the same moment, the orator dedicated the ghosts of these four men, who had been killed by him in battle, and presented them to the deceased chief, to accompany him to the land of spirits. The four lines to the right, and four corresponding lines on the left of these central marks, represent eight eagles' feathers, and are commemorative of his bravery. Eight marks, made across the edge of the inscription-board, signify that he had been a member of eight war parties. The nine transverse marks below the totem, signify that the *orator* who officiated at the funeral, and drew the inscription, had participated himself in nine war parties.

Figure 6 is a grave-post of a Dacota. It was taken in a grove near Fort Snelling, about seven miles above the mouth of the St. Peters. The inscription denotes, that the deceased had killed, during his life, seven men, five women, and four children. The figures being represented without heads, signify that they were slain.

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* These treaties, and his attendance at them, are facts within my personal knowledge. They were held at Prairie du Chien in 1825, at Fond du Lac in 1826, and at Buttes des Morts, on Fox River, in 1827, all convened under the auspices of the American Government.

4. Kekeenowin, or Hieratic Signs of the Medawin and Jeesukawin.

Definition of the Terms and Principles of the Medáwin and the Jeesukáwin; — Their Influence on the general Incidents of Indian Society; — This Influence exerted by pictorial Signs; — Its Application through the Symbolical pictorial Signs of the Medáwin; — The division of the Latter, into the Pure, or Original Meda and the Wabeno; — Transcript of an Indian Music Board; — Songs and Incantations, depicted in Mnemonic Signs; — Examples of the Meda, Ke-kee-no-win, with their Interpretation.

2. Kekeenowin.—This class of signs is devoted to the forest priesthood.

There are two institutions among the North American Indians, which will be found to pervade the whole body of the tribes from the Atlantic to the Pacific, and from the Gulf of Mexico to the Arctic Ocean, however the terms by which they are denoted differ, or the minor rites of the institutions themselves may be modified. They are called in the language from which we adopt most of the aboriginal terms in this treatise, the Medáwin, and the Jeesukáwin. In other terms, they are the art of medical magic, and of prophecy. Both are very ancient in their origin, and very generally diffused, practised, and believed in. It is impossible duly to consider the pictorial art as existing among them, without some prior notice of these leading and characteristic institutions. For, a very large proportion of both the simple representative and symbolic signs they employ, derive their force and significancy from the relation they bear to these institutions.

C. The term meda,[1] in Ottowa meta, is one of long standing in their vocabulary, although, as in many other words, its vowel sounds have probably undergone complete changes in ancient periods, while the consonants m and d have been interchanged according to the generally understood laws of human utterance.[2] Its original significance is obscured by its present application to medical influences, supposed to be exercised by certain mineral or animal matter, as small bits of metals, bones, feathers, and other objects kept in the arcanum of the sacred gush-ke-pe-tá-gun, or medicine-sack. But it is quite obvious that no physical application of these articles is even pretended by the operators, but that they rely wholly on a subtle, invisible, necromantic influence, to be exerted in secret, and at distant as well as contiguous points. The meda, or medawininee, is in all respects a magician. He is distinct from the

[1] The sound of the e, in this word, is long, as in me; of a, as heard in fate.

[2] To denote how these changes would affect the sound, the following modifications of the five vowels will suffice: first vowel sound, mata, meda, mida, moda, muda; second vowel sound, mata, mate, madi, mado, madu

muskekewininee, or medical practitioner, who administers both liquid and dry medicines, bleeds, cups with a horn, and operates on ulcers, swellings, and fresh wounds. The latter takes his denomination from mus-ké-ke, a liquid dose. The former from meda, a mysterious principle. The one is a physician, the other a priest. Meda is clearly a verb, which is shown by its taking the inflection *win*, to form a substantive. To meda, is therefore to perform magic, to trick by magic. Medáwin is the art of magic. Its professors are, simply and definitely, magii or magicians. Men who profess this art are formed into societies, or associations. They are admitted by a public ceremony, after having been instructed in private, and given evidence of their skill or fitness. There is no order of descent. The thing is perfectly voluntary. Any one may become a follower and practiser of the meda. All that is necessary is to adduce proofs of his skill; but it results that none but those possessed of somewhat more than the ordinary shrewdness, art, or foresight, either assume or attain eminence in this art.

D. The art of prophecy, or the Jeesukáwin, differs from the medáwin in its being practised alone, by distinct and solitary individuals, who have no associates; who at least do not exist, and are never known as societies. Prophets start up at long intervals, and far apart, among the Indian tribes. They profess to be under supernatural power, and to be filled with a divine afflatus. It is, however, an art resembling that of the medáwin, and founded on a similar principle of reliance, differing chiefly in the *object sought*. The meta seeks to *propitiate* events; the jossakeed aims to *predict* them. Both appeal to spirits for their power. Both exhibit material substances, as stuffed birds, bones, &c., as objects by or through which the secret energy is to be exercised. The general modes of operation are similar, but vary. The drum is used in both, but the songs and incantations differ. The rattle is confined to the ceremonies of the meda and the wabeno. The jossakeed addresses himself exclusively to the Great Spirit.[1] His office, and his mode of address, are regarded with greater solemnity and awe. His choruses are peculiar, and deemed by the people to carry an air of higher reverence and devotion.

To Jee-suk-a, is to prophesy. The word is a verb, and can be conjugated through the ordinary moods and tenses. The infinitive is converted into a substantive by adding the particle *win*. It is often prefixed to the word man, making the sense prophecy-man, a vulgar mode of using the principles of a very flexible transpositive language. The term, when thus compounded, is Jee-suk-à-win-in-ee.

E. There is a third form, or rather a modification of the medáwin, which I have just alluded to. It is the Wabeno; a term denoting a kind of midnight orgies, which is regarded as a corruption of the méda. Its rites and ceremonies will be particularly

[1] This, it will be recollected, is an indefinite phrase. It may equally mean the great Good, or great Bad Spirit. The latter must, as a general rule, be inferred, when the term *gezha* is not prefixed.

noticed hereafter. Sufficient, it is believed, has been advanced to show the influences which are exerted by these two leading institutions, on the general labors and exertions of the race, both in peace and war. How this influence is exerted through the art of figurative and symbolic signs and pictures, so as to be felt and understood in the remotest part of the tribe, will be perceived in the ensuing examples.

C. MEDAWIN, or To MEDA:—To exhibit the power of the operator, or officiating priest, in the curative art, an elongated lodge is expressly erected from poles and foliage newly cut, and particularly prepared for this purpose. This work is done by assistants of the society, who obey specific directions, but are careful to exclude such species of wood or shrubbery as may be deemed detrimental to the patient. The highest importance is attached to this particular, as well as to other minor points, in the shape, position, or interior arrangements of the lodge. For to discover any oversight of this kind after the ceremony is past, is a sufficient, and, generally, satisfactory cause of failure. When the lodge is prepared, the master of the ceremonies, who has been applied to by the relatives of a sick person, proceeds to it, taking his drum, rattles, and other instruments of his art. He is met by other members of the medá who have been invited to be present and participate in the rites. Having gone through some of the preliminary ceremonies, and chanted some of the songs, the patient is introduced. If too weak to walk, the individual is carried in on a bed or pallet, and laid down in the designated position. The exactness and order which attend every movement, is one of its peculiarities. No one may enter who has not been invited, but spectators are permitted to look on from without. Having entered the arcanum, and all being seated, a mysterious silence is observed for some time. Importance is attached to the course of the winds, the state of the clouds, and other phenomena of the heavens; for it is to be observed that these ceremonies are conducted on open elevated places, and the lodge is built without a roof, so that the minutest changes can be observed. It is a fact worthy of notice, that attempts of the medas to heal the sick are only made when the patients have been given over, or failed *to* obtain relief from the muske-ke-win-in-ee, or physician. If success crown the effort, the bystanders are ready to attribute it to superhuman power; and if he fail, there is the less ground to marvel at it, and the friends are at least satisfied that they have done all in their power. And in this way private affection is soothed, and public opinion satisfied. Such are the feelings that operate in an Indian village.

Admissions to the society of the Meda are always made in public, with every ceremonial demonstration. To prepare a candidate for admission, his chief reliance for success is upon his early dreams and fasts. If these bode good, he is induced to persevere in his preparations, and to make known to the leading men of the institution, from time to time, the results. If these are approved, he is further prepared by resorting to the process of the steam-bath. In this situation he is met by older professors, who are in the habit of here exchanging objects of supposed magical or

medicinal virtue. The candidate is further initiated in such prime secrets as are deemed infallible in the arts of healing or hunting, or resisting the power of enchantment or witchcraft in others. The latter is known, in common parlance, in the Indian country, as the power of throwing, or resisting the power to throw, bad medicine.

I had observed the exhibitions of the Medawin, and the exactness and studious ceremony with which its rites were performed, in 1820, in the region of Lake Superior, and determined to avail myself of the advantages of my official position, in 1822, when I returned as a Government Agent for the tribes, to make further inquiries into its principles and mode of proceeding. And for this purpose, I had its ceremonies repeated, in my office, under the secrecy of closed doors, with every means of both correct interpretation and of recording the result. Prior to this transaction, I had observed, in the hands of an Indian of the Odjibwa tribe, one of those symbolic tablets of pictorial notation, which have been sometimes called Music Boards, from the fact of their devices being sung off, by the initiated of the Meda Society. This constituted the object of the explanations, which, in accordance with the positive requisitions of the leader of the Society, and three other initiates, was thus ceremoniously made. The following plate, 51, is an exact fac simile of it, the original tablet having been run by Mr. Peter Maveric through his rolling press, in the city of New York, in 1825.

It is to these figures that the term Mnemonic symbols is applied. They are called Nugamoon-un by the natives, that is to say, songs. They are the second grade of symbolic pictures of the character of Ke-ke-no-win, or instructions. They are merely suggestive to the memory, of the words of the particular song or chant, of which each figure is the type. The words of these songs are fixed, and not variable, as well as the notes to which they are sung. But these words, to be repeated, must have been previously learned by, and known to, the singer. Otherwise, although their ideographic character and value would be apparent, and would not be mistaken, he would not be able to sing the words of the song. Sounds are no further preserved by these mnemonic signs, than is incident, more or less, to all pure figurative or representative pictures. The simple figure of a quadruped, a man or a bird, recalls the *name* of a quadruped, a man or a bird. It recalls to the Indian's mind the corresponding sounds, in his vocabulary of awaysee, ininee, penaysee. This is of some value, in the interpretation of the historical inscriptions, or that class of them, for which their vocabulary provides the term of Muz-zin-au-bik-oan, or rock-writings. It conveys the *names* of the actors, with their respective tribes, and the clans or leading families of the tribes. We may thus recall something of the living language from the oblivion of the past, by the pictorial method. Mnemonic symbols are thus at the threshold of the hieroglyphic. I suspect that each chant has a key symbol and that it is the character of this particular symbol, which operates to direct the memory, as to

the number, locality, color of paper or type, or other particular circumstances, on the page of a printed book, are known, in some cases, to recall, or energize the memories of learners.

The Plate number 51, embraces two parts. 1. The songs of the Meda proper, which are regarded as most sacred. 2. Songs of the Wabeno. We will commence with the former, which consists of twenty-two key-symbols, denoting the same number of independent chants.

Figure 1. A medicine lodge filled with the presence of the Great Spirit, who, it is affirmed, came down with wings, to instruct the Indians in these ceremonies. The meda, or priest, sings —

Mon e do
We gum ig
Ah to dum ing
Ne we peen de gay.[1]

The Great Spirit's lodge — you have heard of it. I will enter it.

While this is sung, and repeated, the priest shakes his shi-shi-gwun, and each member of the society holds up one hand in a beseeching manner. All stand, without dancing. The drum is not struck during this introductory chant.

Figure 2. A candidate for admission crowned with feathers, and holding, suspended to his arm, an otter-skin pouch, with the wind represented as gushing out of one end. He sings, repeating after the priest, all dancing, with the accompaniment of the drum and rattle:

Ne sau moo zhug
We au ne nay
Ozh ke bug ge ze
We ge waum
Ne peen de gay.

I have always loved that that I seek. I go into the new green leaf lodge.

Figure 3 marks a pause, during which the victuals prepared for the feast are introduced.

Figure 4. A man holding a dish in his hand, and decorated with magic feathers on his wrists, indicating his character as master of the feast. All sing,

Ne mau tau
O ne go
Ne kaun.

I shall give you a share, my friend.

Figure 5. A lodge apart from that in which the meda-men are assembled, having a vapor-bath within it. The elder men go into this lodge, and during the time of their taking the bath, or immediately preceding it, tell each other certain secrets relative

[1] The initial letter of each line is printed in capitals to facilitate the reading.

to the arts they employ in the Medáwin. The six heavy marks at the top of the lodge indicate the steam escaping from the bath. There are three orders of men in this society, called 1. meda; 2. saugemau; and 3. ogemau. And it is in these secret exchanges of arts, or rather the communication of unknown secrets from the higher to the lower orders, that they are exalted from one to another degree.

The priest sings, all following and beating time on their drums with small sticks, while they move round the lodge with a measured tread:

We ge waum
Peen de gay
Ke kaun
E naun
Sain goon ah wau.

I go into the bath—I blow my brother strong.

Figure 6. The arm of the priest, or master of ceremonies, who conducts the candidate, represented in connection with the next figure.

Figure 7. The goods, or presents given, as a fee of admission, by the novitiate.

Ne we hau gwe no
Ne we hau gwe no
No sa, ne kaun.

I wish to wear this, my father—my friend.

Figure 8. A meda-tree. The recurved projection from the trunk denotes the root that supplies the medicine.

Au ne i au ne nay
Au ne i au ne nay
Pa zhik wau kooz e
Ke mit tig o me naun
Ke we taush kow au.

What! my life, my single tree!—we dance around you.

Figure 9. A stuffed crane-skin, employed as a medicine-bag. By shaking this in the dance, plovers and other small birds are made, by a sleight-of-hand trickery, to jump out of it. These, the novitiates are taught, spring from the bag by the strong power of necromancy imparted by the skill or supernatural power of the operator. This is one of the prime arts of the dance.

Nin gau
Wau bum au
A zhe aun
Kau zhe go wid
A zhe aun.

I wish to see them appear— that that has grown — I wish them to appear.

Figure 10. An arrow in the supposed circle of the sky. Represents a charmed

arrow, which, by the power of the meda of the person owning it, is capable of penetrating the entire circle of the sky, and accomplishing the object for which it is shot out from the bow.

Au neen, a zhe me go
Me day we, in in e wau
I. e. e. me da, me gun ee.

What are you saying, you mee dá man? This — this is the meda bone.

Figure 11. The Ka kaik, a species of small hawk, swift of wing, and capable of flying high into the sky. The skin of this bird is worn round the necks of warriors going into battle.

Ne kaik-wy on
Tau be taib way we tum.

My kite's skin is fluttering.

Figure 12. The sky, or celestial hemisphere, with the symbol of the Great Spirit looking over it. A Manito's arm is raised up from the earth in a supplicating posture. Birds of good omen are believed to be in the sky.

Ke wee tau gee zhig
Noan dau wa
Mon e do.

All round the circle of the sky I hear the Spirit's voice.

Figure 13. The next figure denotes a pause in the ceremonies.

Figure 14. A meda-tree. The idea represented is a tree animated by magic or spiritual power.

Wa be no
Mit tig o
Wa be no
Mit tig o
Ne ne mee
Kau go
Ne ne mee
Kau go.

The Wabeno tree — it dances.

Figure 15. A stick used to beat the Ta-wa-e-gun or drum.

Pa bau neen
Wa wa seen
Neen bau gi e gun.

How rings aloud the drum-stick's sound.

Figure 16. Half of the celestial hemisphere — an Indian walking upon it. The idea symbolized is the sun pursuing his diurnal course till noon.

Nau baun
A gee zhig a
Pe moos au tun aun
Geezh ig.

I walk upon half of the sky.

Figure 17. The Great Spirit filling all space with his beams, and enlightening the world by the halo of his head. He is here depicted as the god of thunder and lightning.

Ke we tau
Gee zhig
Ka te kway
We teém aun.

I sound all round the sky, that they can hear me.

Figure 18. The Ta-wa-e-gun, or single-headed drum.

Ke gau tay
Be tow au
Neen in tay way e gun.

You shall hear the sound of my Ta-wa-e-gun.

Figure 19. The Ta-wa-e-gonse, or tambourine, ornamented with feathers, and a wing, indicative of its being prepared for a sacred use.

Kee nees o tau nay
In tay way e gun.

Do you understand my drum?

Figure 20. A raven. The skin and feathers of this bird are worn as head ornaments.

Kau gau ge wau
In way aun
Way me gwun e aun.

I sing the raven that has brave feathers.

Figure 21. A crow, the wings and head of which are worn as a head-dress.

In daun daig o
In daun daig o
Wy aun
Ne ow way.

I am the crow—I am the crow—his skin is my body.

Figure 22. A medicine lodge. A leader or master of the Meda society, standing with his drum-stick raised, and holding in his hands the clouds and the celestial hemisphere.

Ne peen de gay
Ne peen de gay

Ke we ge waun
Ke we ge waun.

I wish to go into your lodge—I go into your lodge.

The idea of the sacred word Meda, which appears to be made prominent by these chants, is a subtile and all-pervading Principle of Power (whether good, or merely *great* power is not established by any allusions) which is to be propitiated by, or acted on, through certain animals, or plants, or mere objects of art, and thus brought under the control of the Meda-man, or necromancer. He exhibits to the initiates and the members of his lodge fraternity, a series of boasting and symbolic declamation. This ceremony is called a medicine dance, and the lodge a medicine lodge. But the word mus-ké-ke, or medicine, does not occur in it, nor is there any allusion to the healing art, except in a single instance, in the chant No. 8, in which the term "Au koozze" occurs. This is the third person of the indicative, he (or she), sick. The operators are not mus-ke-ke-win-in-ee, or physicians, but Meda-win-in-ee, that is Meda-men. They assemble, not to teach the art of healing, but the art of supplicating spirits. They do not rely on physical, but supernatural power. It is, indeed, a perversion of terms to call the institution a medicine society. Its members are not professors of the mus-ke-ke-win, but the Medáwin—not medicine-men, but necromancers, or medical magii.

5. Rites and Symbolic Notations of the Songs of the Wabeno.

Pictorial Signs used in the Society of the Wabeno; — A Description of the Character and Objects of this Institution; — Etymology of the term;—The Season favorable for this, and other Ceremonial observances; — Vicissitudes of Indian Life; — Fallacy of the Indian Theology;— Interpretation of the Pictorial Mnemonic Signs of the Wabeno, with the text of the Nugamoon-un; — Synoptical Table, showing the Ideographic value of the Symbols.

E. Wabeno.—It has been stated that this institution among our Indians is a modification of the ceremonies of the Meda. It is stated by judicious persons among themselves to be of modern origin. They regard it as a degraded form of the mysteries of the Meda, which, according to Pottawatomie tradition (page 317), were introduced by the Manitoes to revive Manabozho out of his gloom, on account of the death of Chebiábos. It permits the introduction of a class of subjects, which are studiously excluded from the Meda. It is in the orgies of this society alone, that we hear the topic of love being introduced. Songs of love mingle in its mysteries, and are made subjects of mnemonic record. The mysteries of this institution are always conducted at night, and never by day. Many of the deceptions practised in the exhibition of its arts,

derive their effect from the presence of darkness. Tricks by fire are of this character. The sounds of its orgies are often heard at very late hours; and if the sound of the Indian drum be heard after midnight, it may generally be inferred with certainty to proceed from the circle of the Wabenoes. The term Wabeno itself is a derivative from Wabun, the morning light. Its orgies are protracted till morning dawn. Men of-the-Dawn, is a free translation of the term in its plural form.

In exhibiting the characters of the pictorial art as applied to the dances and songs of the Wabeno, it is essential to exhibit the character and tendency of the institution, as based on Indian manners and customs. There is so little truly known on the subject, that the investigation is not deemed out of place. Almost all the allusions of travellers on this topic are vague, and its ceremonies are spoken of as things to be gazed and wondered at. Writers seem often to have partaken of no small part of the spirit of mystery which actuated the breasts of the performers.

The season of revelry and dissipation among these tribes is that which follows the termination of the winter and spring hunts. It is at this time that the hunter's hands are filled; and he quits the remote forests where he has exerted his energies in the chase to visit the frontiers, and exchange his skins and peltries and his sugar for goods and merchandise of American or European manufacture. Means are thus enjoyed which he cannot as well command at any other season. But, above all, this is the portion of the year when the hunting of animals must be discontinued. It is the season of reproduction. Skins and furs are now out of season, and, if bought, would command no price. Nature herself provides for this repose: the pelt is bad, and parts from the skin. By the 1st of June, throughout all the latitudes north of 42°, the forests are deserted, and the various bands of hunters are found to be assembled round the frontier forts and towns, or dispersed along the shores of the lakes and rivers in their vicinity. It is the natural carnival of the tribes. The young amuse themselves in sports, ball-playing, and dances. The old take counsel on their affairs. The medas, the wabenoes, and jossakeeds, exert their skill. It is the season for feasts: all hearts are disposed to rejoice. As long as means last, the round of visits and feasting is kept up. By a people who are habitually prone to forget the past, and are unmindful of the future, the cares and hardships of the hunter's life are no longer thought of. The warmth and mildness of the season is a powerful incentive to these periodical indulgences: dissipation is added to sloth, and riot to indulgence. So completely absorbing are these objects—so fully do they harmonize with the feelings, wishes, theology, and philosophy of the Indian mind, that the hours of summer may be said to slip away unperceived, and the Indian is awakened from his imaginary trance at the opening of autumn, by the stern calls of want and hunger. He now sees that he must again rouse himself for the chase, or starve. He must prepare once more to plunge into the recesses of the forest, or submit to that penury and degradation which is the price of his continuance within the settlements. The tempests of autumn, which begin to whistle around

his summer wigwam, are no surer tokens of the ice and snows which will block up his path, than the failure of all his means are, that it is only by renewed exertion, and a manly resort to his gun and trap, his arrow and his spear, that he can replace them. Such is the round of vicissitudes of Indian life. He labors during the fall and winter, that he may enjoy the spring and summer. He accumulates nothing but his experience; and this tells him that life is a round of severe trials, and he is soonest happy who is first relieved of it. He has no religion to inform him of the realities of a state of futurity; and the consequence is that he is early wearied of this round of severe vicissitudes, and is absolutely glad when the hour of death arrives.

The whole tendency of the Indian secret institutions is to acquire power, through belief in a multiplicity of spirits; to pry into futurity by this means, that he may provide against untoward events; to propitiate the class of benign spirits, that he may have success in war, in hunting, and in the medical art; or by acceptable sacrifices, incantations, and songs, to the class of malignant spirits, that his social intercourse and passions may have free scope. It is to the latter objects that the association of the wabeno is directed. Full examples of its songs and ceremonies, as recorded in the pictorial inscriptions, will be submitted, because, without such testimony, symbol upon symbol and song upon song, the actual scope and purport of it, and its important influence upon the Indian mind, could not be understood.

The following eighteen symbolic signs, constitute part No. 2 of Plate 51. It is to be remarked that the order of these figures is strictly observed, but in taking impressions from the wooden tablet on which they were originally cut, the plate is reversed. This does not affect the numbers, or the order of interpretation.

Figure 1 represents a necromancer's or wabeno's hand, in a supplicating posture, holding a bone. Such an object is worn as a charm or amulet, in a belt around the body. He opens the rites he is about to perform with an address, of which the following is a translation:

I speak to the Great Spirit to save my life by this token, (the bone,) and to make it efficacious for my preservation and success. It is not I that have made it, but thou, Great Spirit, who hast made this world, and all things in it. Hear me, and show pity to my cry. He then sings—

(*Cabalistic chorus.*) Na ha
Yaw ne
Na ha
Yaw ne
Ning o sau hau wa be no.

I am a friend of the wabeno.

Figure 2. Symbol of a tree which is supposed to emit supernatural sounds, sometimes like a great gun, and is thought to be the residence of a spirit.

(*Cabalistic chorus.*) Hi au ha
Ge he he
He he ge
Hi au ha
Hi au ge
We gau bo we aun.

I (the tree) sound for my life as I stand.

The drum and she-she-gwun are used while these chants are being sung as solos by the wabeno, the Indians, in the mean time, sitting. As soon as they are finished, they rise, and begin to dance.

Figure 3. A wabeno dog, running towards his master, who is in the act of vomiting blood. All sing—

In dau ge
We but to
Ne au wee
In dau ge
We but to
Ne au wee. (Repeat and transpose.)

I shall run to him—who is my body.

(*Cabalistic chorus.*) Hi au ha
Ge he he
He he ge
Hi au ha
Hi au ge.

Figure 4. A sick man throwing up blood..

In gau ge we na
In gau ge we na
Wa be no nis se o doan.

I struggle for life — Wabeno kill it.

Figure 5. The Pipe. The idea represented is, that "bad medicine" has been applied to the pipe — it is unsuspectingly smoked by one whom the owner wishes to injure. The smoke enters his lungs — he withers up.

Me da wug
In goos au
Op-wau gun
In goos au
Way me gwun id.
Hi au ha, &c.

The meda I fear — the pipe I fear — that has feathers on.

Figure 6. A worm called Mösa, that eats decaying wood, making a sounding noise.

Wa be no
Mŏ say
Wi au
In dau wau
Mŏ say
Wi au
Mŏ say
Wi au
Ne in dau wau.
Hi au ha, &c.

The Mosay's skin I use — The Mosay's skin I use.

Figure 7. A Wabeno Spirit, who is addressed for aid.

Aw wa nain,
Pau ne bow id
Wa be no
Mon e do
Pau ne bow id
Au wa nain, &c.
Hi au ha, &c.

Who is that, standing there? A wabeno spirit, standing there!

Figure 8. An Indian hunter, gifted with the arts of the Wabeno, holding a bow and arrow. He is hungry — he goes out to hunt — he has four arrows. He finds a moose's track, and observing where the animal has urinated, takes some of the urine and after mixing his medicines in it, puts some of it upon his arrow and fires into the track. The moose is seized with a strangury, and falling behind his companions in consequence, the Indian is able to overtake and kill him.

(*Cabalistic chorus.*) Way ha
Way ha
Yau hah
Way ha
Was sau way kŭm ig
A nuh ke yaun.
Way ha, &c.

I shoot far over the earth.

Figure 9. The sign symbolizing the Great Spirit, filling the sky with his presence.

A ne kwa
Ge bi aun
Ge zhick
O wun
Hi au ha, &c.

Where I sit, my head points to the centre of the sky.

At this point of the ceremonies there is a pause. The singers and performers having completed certain evolutions around the Meda lodge, sit down. After a time, they arise, and resume the ceremonies, dancing, and moving about the lodge, in a certain order, while they sing, and shake their *she-she-gwuns*, or rattles.

Figure 10. The sky with clouds.

Ah no kwut
I a ha
Ah no kwut
Ge zhig o
Neen gee zhig o
Ah no kwut.
Hi au ha, &c.

The cloud that is in my sky — the cloud that is in my sky.

Figure 11. A cloudy sky, with a fabulous animal, called the white tiger, with a long tail, who chases the clouds. He is sometimes represented with wings from the centre of his back. He now wishes to see above: i. e., to peep into futurity.

Ke zhig
O wee
Wa bun daun
O ho. (Repeat and transpose.)
Hi au ha, &c.

He wishes to look into the sky. Into the sky he wishes to look.

Figure 12. A wolf called Mohwha. He is depicted with horns to denote power. The idea called to mind by this figure is this,— Meda-win, or mystic medicine, has been put on the head and tail of the animal, to induce him to hunt for the wabeno.

Neen gah gee
O sau go to
Ge ha
Mah bah
Moh wha, he he wau.
Hi au ha, &c.

I shall hunt the prey. This wolf of mine.

At this point of the ceremonies there is a pause, denoted by the two vertical bars of the symbolic inscription. They now arise, and the drum and dance is renewed.

Figure 13. The Kanieu, or War Eagle. This bird, the theory affirms, hovers near the fight, and eats the slain as soon as the battle is ended. His feathers indicate the highest honors, when worn by warriors.

Tah gee zhig ho (Tah is imperative; Ho calls to action.)
Tah gee zhig o

Pe nay see wug (Plural in wug.)
Tah gee zhig ho.
Hi au ha, &c.

They shall gather in the sky. The birds shall gather in the sky.

Figure 14. A bow and arrow. When the follower of these arts wishes to kill a particular animal, a grass or cloth image of it is made, and hung up in his wigwam. After repeating the following incantation, he shoots at the image. If he drives the arrow into it, it is deemed a sign that the animal will be killed next day, and the arrow is immediately drawn out and burnt.

Hi nah ka (declaration.)
Ne ah way
Hi nah ka
Ne ah way. (Repeat four or five times.)

See how I fire!

Figure 15. A master of the magical or Meda art sitting on the globe: with one hand he holds the sky — the forked end of which, as delineated, represents a cloud symbolically.[1] He is drawing down knowledge from the sky for the benefit of the human race.

Na nau hau be
Na nau hau be
Gee zhig oom
A no o maun.

What do I see? What do I see? My sky that I am pointing to.

Figure 16. The sun representing the Great Spirit. He is symbolized as looking down upon the Indians, and is pleased to behold these ceremonies.

Tau neen a
Wau bum a un
Tau neen a
Wau bum a un
Kau nah wau bum e aun a
Kau nah wau bum e aun a.

Why do you look at me?

Figure 17. A bow and arrow, the latter directed downward. This is represented as an enchanted bow. There is a post in the centre of the lodge, and five pebbles lying in a row. The Wabeno affects to shoot through four of them, and the arrow sticks in the fifth, leaving them all strung upon its point.

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[1] This drawing is found graphically to depict the leading idea embraced in Isaiah xl. 22. See Plate 51, No. 15. The same verse gives the leading thought of a curtained sky, represented in Figures 10 and 11 of the same plate.

Drawn by Capt. S. Eastman U.S.A.

Wa go nain
Ah wa nain
An au ka aun?
Os sin een e
Win o bun
Ah au ka aun? (Repeat three times.)

Why! what is it I am firing at, on the ground? It was pebbles I was firing at.

Figure 18. A young man, under the excitement of love, with feathers on his head, and a drum and drum-stick in his hands. He affects power to influence the object of his desires.

Nun dau wau kum
Ta way e gun
Nun dau wau kum
Ta way e gun
A zhau wau kum ig
In dun wa we tum
A zhau wau kum ig
In dun wa we tum.
Hi, au, ha, &c.

Hear my drum — hear my drum, [though you be] on the other side of the earth, hear my drum.

Thus far there is very little to draw a line between the principles of the meda and wabeno. With the exception of Figure 18, the general objects of the signs and chants are the same. The sun is employed here, as there, as the symbol of the Great Spirit. The ideas that are entertained of this Spirit are to be drawn from the belief of the wabeno, that he will exert his power, through necromancy, in the vegetable kingdom (Figure 2), and among the classes of animals and birds (Figures 3, 6, 11, 12, 13), that he will endow inanimate objects with equal power (Figures 5, 14, 17), and, finally, that he will not favor the designs of men, when they are not directed to right and virtuous objects. This is clearly the province assigned by Indian belief for the antagonistical power of evil. If this be not demonology, we have no true conceptions of it. But we introduce some further illustrations.

Plate 52 depicts thirty mnemonic symbols of this institution, transcribed from the reverse of the tablet which yielded Plate 51.

Figure 1 depicts a preliminary chant. The figure represents a lodge prepared for a nocturnal dance, marked with seven crosses, to denote dead bodies, and crowned with a magic bone and feathers. It is fancied that this lodge has the power of loco motion, or crawling about. The owner, and inviter of the guests, sings solus.

Wa be no (Wabeno.)
Pe mo da (he creep, Ind. mood.)

Ne we ge wam (my lodge.)
Wa be no
Pe mo da
Ne we ge wam.
Hi, au, ha
Nhuh e way
Nhuh e way.
Ha! ha! huh! huh! huh!

My lodge crawls by the Wabeno's power.

Figure 2. An Indian holding a snake in his hand. He has been taken, it is understood, underground by the power of medical magic, and is exhibited as a triumph of skill.

Ah nau
Muk kum mig
In doan
De naun
Nau muk
Kum mig,
Hi, au, ha, &c.

Under the ground I have taken him.

The inscription is here marked by a bar, indicating a pause. At this point the singing becomes general, and the dance begins, accompanied with the ordinary musical instruments.

Figure 3. An Indian in a sitting posture, crowned with feathers, and holding out a drum-stick.

Gi a neen (*Gia*, adverb also.)
Ne wa be no
Gi a neen
Ne wa be no.
Hi, a, ee, &c. (*Repeat—Cabalistic.*)

I too am a Wabeno—I too am a Wabeno.

Figure 4. A spirit dancing on the half of the sky. The horns denote either a spirit, or a wabeno filled with a spirit.

Wa be no
Nau ne me au
Wa be no
Nau ne me au.
Hi, a, ee, &c. (*Cabalistic.*)

I make the Wabenos dance.

Fgure 5. A magic bone decorated with feathers. This is a symbol indicative of the power of passing through the air, as if with wings.

Kee zhig
Ee me
In ge
Na osh
She au.
Hi! a! ee! &c. (*Cabalistic.*)

The sky! the sky I sail upon!

Figure 6. A great serpent, called gitchy keenabic, always depicted, as in this instance, with horns. It is the symbol of life.

Mon e do
We aun
A ko
Wa be no.
Nuk ka yaun.
Hi! a! &c.

I am a wabeno spirit—this is my work.

Figure 7. A hunter, with a bow and arrow. By appealing to his magical arts he fancies himself able to see animals at a distance, and to bring them into his path, so that he can kill them. In all this he is influenced by looking at his secret symbolical signs or markings.

Ne zhow
We nuk
Ka yawn
Ne zhow
We nuk
Ka yawn.
Hi! a! &c. (*Cabalistic.*)

I work with two bodies.

Figure 8. A black owl. (Rara avis.)

Ko ko ko
Au
Ko ko ko
Au
Muk ko da
Ko ko ko
Au.
Hi! a! haa! &c. (*Cabalistic.*)

The owl—the owl—the great black owl.

Figure 9. A wolf standing on the sky. A gift is sought. This is the symbol of vigilance.

In dau
Na wau
In dau
Nun do
Na wau.
Hi! e! ha! &c.

Let me hunt for it.

Figure 10. Flames.

Wau nau ko
Na! ha! ha! (*Cabalistic.*)
Wau nau ho
Na! ha! ha!

Burning flames — Burning flames.

Figure 11. This figure represents a fœtus half-grown in the womb. The idea of its age is symbolized by its having but one wing. The singer here uses a mode of phraseology by which he conceals, at the same time that he partly reveals, a fact in his private history or attachments.

Ne chau nis
Ne chau nis
Ke zhow way
Ne min.
Hi! a! &c.

My little child — my little child, I show you pity.

Figure 12. A tree, supposed to be animated by a demon.

Ki! au! ge!
We gau bo
We aun
Ki au ge, we gau bo, we aun.
Hi! a! &c.

I turn round in standing.

Figure 13. A female. She is depicted as one who has rejected the addresses of many. A rejected lover procures mystic medicine, and applies it to her breasts and the soles of her feet. This causes her to sleep, during which he makes captive of her, and carries her off to the woods.

Wa be no wau (Wabeno-power.)
Ne augh we na (Occult.)
Nyah eh wa, &c. (Triumphant chorus.)

A pause in the ceremonies is denoted by bars between figures 13 and 14.

Figure 14. A Wabeno spirit of the air. He is depicted with wings, and a tail like a bird, to denote his power in the air, and on the earth.

Wa be no
Ne bow
We tah
Wa be no
Ne bow
We tah.

Wabeno, let us stand.

Figure 15. An anomalous symbol of the moon, representing a great wabeno spirit, whose power is indicated by his horns, and rays depending from his chin like a beard. The symbol is obscure.

In di aun
O zhe toan
Neen ah
Ne peek wun au.

I have made it—with my back.

Figure 16. A Wabeno bone ornamented similar to figures 1 and 5.

In ge
We nau wau
In ge
We nau wau.

I have made him struggle for life.

Figure 17. A tree with human legs and feet. A symbol of the power of the Wabeno in the vegetable kingdom.

Wa bun
Ne ge kee
We gau yaun.

I dance till daylight.

Figure 18. A magic bone. By this sign the performer boasts of supernatural power.

Ke we
Gau yaun
Ke we
Gau yaun.

Dance around, ye!

Figure 19. A drum-stick. The symbol of a co-laborer in the art.

Gi a neen
In gwis say.

And I too, my son.

Figure 20. A Wabeno with one horn, holding up a drum-stick. This figure denotes a newly initiated member.

We au be no wid
Nin go sau.

He that is a Wabeno, I fear.

Figure 21. A headless man standing on the top of the earth. A prime symbol of miraculous power and boasting.

Ke ow
We naun
Ke ow
We naun.

Your body I make go, (alluding to figure No. 1.)

Figure 22. A tree reaching up to the arc of the sky. He symbolizes the great power of the tree to whose magic power he trusts.

Neem bay
Shau ko naun
Ne met tig oam.

I paint my tree to the sky.

Figure 23. A human figure, with horns, holding a club. It is the figure of a Wabeno.

Hwee o (A cabalistic expression, supposed to express a wish.)
Gwis say
Hwee o
Gwis say. (Four repeats and chorus.)

I wish a son.

Figure 24. The *falco furcatus* or swallow-tailed hawk, called Shau-shau-won-e-bee-see, a bird that preys on reptiles. It is an emblem of power in war.

Wa be no
Ne gee zig oom. (Four repeats and chorus.)

My Wabeno sky.

The next figure of vertical lines denotes a pause. The dancers rest and then resume the dance.

Figure 25. A master of the Wabeno society, depicted with one horn reversed, and a single arm. The idea is, that with but one arm his power is great. His heart is shown to denote the influence of the Meda on it.

Git shee
Wa be no
Ne ow
Hwee. (Four repeats and chorus.)

My body is a great Wabeno.

Figure 26. A nondescript bird of ill omen.

Nin gwis say to kun
Pe mis say to kun.

My son's bone—The walking bone.

Figure 27. A human body with the head and wings of a bird.

Ti um bau she wug
Ne kdun. (Repeat and chorus.)

They will fly up, my friend.

Figure 28. Mississay — a turkey. A symbol of boasted power in the operator.

Mississay′ in dow au
Mississay′ in dow au.

The turkey I make use of.

Figure 29. A wolf. A symbol of assumed power to search.

Muh way wau
Hi au i aun.

I have a wolf,— a wolf's skin.

Figure 30. A flying lizard, or dragon snake. He calls in question the power assumed.

Kau we au Mon e do
Kau we au Mon e do
Wa be no Mon e do.

There is no spirit! There is no spirit! Wabeno spirit.

Figure 31. A Wabeno personified with the power of flying.

Wa hau bun o
Git shee
Wa hau bun o
Git shee
Wa bun o, ho!
Ge ozhe tone.

Great Wabeno! Great Wabeno! I make the Wabeno.

Here is another pause or division of the ceremonies, and songs.

Figure 32. A pipe of ceremony. This is the emblem of peace. The operator smokes it to propitiate success.

Au neen meetay wau
Mo ne do wid
Wa bun e dun.

What, meda, my spirit brother, do you see?

Figures 33, 34. A symbol of the moon, with rays, &c. Represents a man and a snake.

Noan dau tib bik
Koot che′ hau no tau.

In the night I come to harm you.

Figure 35. A Wabeno. This is, apparently, a symbol of the sun.

Wa bun oong
Un i tau tub be aun.

I am sitting in the east.

Figure 36. A dragon-winged serpent, or Gitchee Kanaibik. Denotes great power over life.

Ne ow way; ne kaun
In ge we now waun.

With my body, brother, I shall knock you down.

Figure 37. A wolf depicted with a charmed heart, to denote the magic power of the Meda.

Ningo tohee
Muh whay
Ow wau.

Run, wolf—your body's mine.

Figure 38. A magic bone, the boasted symbol of necromantic skill. The words accompanying this figure were not given.

The following synopsis, referring by figures to the hieroglyphic devices, exhibits the words of the chants and incantations in their simplest forms, together with the key-sign or ideographic terms of pictorial notation.

SYNOPSIS OF WABENO SONGS.—PLATE 52.

Chant, or Incantation.	*Key-Symbol, or Ideographic term of Notation.*
1. My lodge crawls by the Wabeno power.	A lodge for nocturnal dances.
2. Under the ground I have taken him.	A man holding a live snake.
3. I too am a Wabeno.	The figure of a man sitting, crowned with feathers.
4. I make the Wabeno dance.	A man standing on half the celestial hemisphere.
5. The sky—the sky I sail upon.	A magic bone, decorated with feathers.
6. I am a Wabeno spirit—this is my work.	A horned serpent.
7. I work with two bodies.	A hunter with a bow and arrow.
8. The owl! the owl! the black owl!	An owl.
9. Let me hunt for it.	A wolf standing on the sky.
10. The burning flames.	Flames.
11. My little child, I show you pity.	A human figure with one wing.
12. I turn round in standing.	A tree.
13. The Wabeno's power.	A female figure.
14. Wabeno, let us stand.	An artificial figure representing a spirit.
15. I have made it with my back.	A demoniacal spirit.

Chant, or Incantation.	*Key-Symbol, or Ideographic term of Notation.*
16. I have made him struggle for life.	A magic bone with wings.
17. I dance till day light.	A tree with human legs.
18. Dance around.	A magic bone.
19. And I too, my son.	A drum-stick.
20. He that is a Wabeno I fear.	A man with one horn, holding a drum-stick.
21. Your body I make go.	A headless man standing on the sky, depicted with a charmed heart.
22. I paint my tree to the sky.	A tree reaching the supposed arc of the sky.
23. I wish a son.	A man, depicted with the emblems of power.
24. My wabeno sky.	A swallow-tailed hawk.
25. My body is a great Wabeno.	A man, depicted with one arm, and one horn reversed.
26. My son's bone—the crawling bone.	A nondescript bird.
27. They will fly up, my friends.	A human body, with the head and wings of a bird.
28. The turkey I make use of.	A turkey.
29. The wolf's skin I have.	A wolf.
30. There is no spirit—no Wabeno spirit.	A flying lizard.
31. Great Wabeno. I make the Wabeno.	A man with wings and horns.
32. What spirit, brother, do you see?	A pipe.
33. 34. At night I come to harm you.	Symbol of the moon.
35. I am sitting in the East.	Symbol of the sun.
36. With my meda, brother, I shall knock you down.	A monster snake, or dragon.
37. Run, wolf! your body 's mine.	A wolf, depicted with a charmed heart.
38.	A magic bone.

It is manifest from this examination, that there is no clue given to the words of these chants, except that resulting from the power of association of ideas, and that the words must have been committed to memory before this pictorial record could be read, or sung. As an aid to the memory of the Meda, or the Wabeno, seated in a large assemblage, and surrounded with objects suited to withdraw his attention from the chants, and weaken his verbal memory, such inscriptions must be of high use. To others, besides the Medas, Jossakeeds and Wabenos, they must present only such general ideographic information as is denoted by the simple symbols, or representative signs.

6. Symbols of Hunting and feats of the Chase.

Application of Pictorial Characters to the Art of Hunting and the Incidents of the Chase. — Influence of the Belief in the Medáwin on early Education in Forest Arts. — Examples of the Symbols and Figures employed for this purpose, by the Tribes around the Sources of the Mississippi. — Mnemonic Songs of the Meda, — sung preparatory to Hunting. — Further Examples from the Upper Missouri. — Bark Record of a Chief's success in War and Hunting, Evidence of attempts to preserve Biographical Events, in Picture-Writing.

F. Keossawin, or Hunting. — The signs used in the preparations for, and in the pursuit of the chase, are the Kekewin and the Kekenowin, that is to say, a mixture of both the simple representative signs and instructions, and symbolic signs. The art of hunting is the primary object of a non-agricultural people, and all these institutions are made to bend and conform to it. The earliest rudimental art, taught the hunter's son, is the use of the bow and arrow, and his first success among the birds and smaller animals, which surround his father's lodge, is hailed as an omen of his future triumph in the chase. And his indulgent parents always prepare, on this occasion, a family feast, in which the little bird, or animal killed by the tiny huntsman, is ostentatiously displayed. The boy himself is placed at the head of the feast, and his mother and sisters wait upon him, and dish out the food, with a truly oriental formality. The skill and pride of manhood, thus early fanned into life, is fed with stronger fuel, as he grows up, till increase of strength, and knowledge of the woods and of the habits of the animated creation, enable him to bring down the deer, to capture the bear, and to entrap the beaver. That the Indian's belief in the magical power of the meda, and the art of the meda-wininee, or meda-men, should be brought to bear on the business of hunting, may naturally be inferred. The ceremonies which the father adopts, to propitiate success, the son imitates; and, long before he reaches manhood, he esteems these ceremonies of the highest importance. The efficacy of the different baits put in traps, the secret virtues and power of certain substances carried in the medicine-sack, and exhibited in the secret arcanum of the meda's and jossakeed's lodge, are objects of eager and earnest attainment. And no small part of the time the hunter devotes to ceremonial rites, is given up to this mystical part of his art.

It is believed that these secret and sacred objects of care, preserved in his Skipetagun, are endowed with virtues to attract animals in certain ranges of country, to which they *are willed* by the jossakeed. An arrow touched by their magical medáwin, and afterwards fired into the *track* of an animal, is believed to arrest his course, or otherwise affect him until the hunter can come up. A similar virtue is believed to be exerted, if but the figure of the animal sought be drawn on wood or bark, and afterwards submitted to the efficacious influences of the magic medicine, and the incanta-

tion. Pictographs of such drawings are frequently carried about by the hunter, to avail himself of their influence, or of the means of becoming more perfect in the mystical art, by intercommunication with other and distant Indians. These figures are often drawn on portable objects of his property, such as implements of hunting, canoes, utensils, or rolls of lodge-barks, or sheathing. So subtile is the principle of influence exerted by the Medáwug or magii deemed to be, that one hunter, it is believed, can wield it against another, and thus paralyze his exertions, or render his weapons, or his skill in using them, inefficacious. The belief in this species of witchcraft, among all the tribes, is very general. I have never found any exceptions among them as whole tribes. Particular professors in the arts of the societies of the Jeesukáwin and Medáwin, are believed to be more skilful or powerful than others; and much of the native energies of the Red men is wasted and paralyzed by endeavors to acquire skill in their occult arts. The annexed figures, (Plate 53,) are transcribed and selected from separate inscriptions used in hunting, throughout a wide range of the north-western latitudes, reaching from St. Mary's at the foot of Lake Superior, to Red River and the plains of the Saskatchewine.

No. 1, is the figure of a learner in the Meda. He is drawn with waved lines from each ear, to denote hearing or attention. His heart is depicted as under the magic influence. He sings this chant:—

Shi e gwuh
Ne no no nen dum
Ah me
Me da win in ne wug
Ne kau nug
A na mud ub é yuss.

Now I hear it from the Meda-men, my friends, who are sitting around.

No. 2, is a compound symbol, denoting a beaver in the act of swimming down a stream. The professor of the art affects to have power from, or coincident with the Great Spirit. He exclaims—

A wa nain
Ba mah je wung-a?
Mo ne do
O be mah je wun-ga.

Who makes this river to flow? The Monedo, he makes the stream to flow.

No. 3, depicts a Meda. He is about to open his performances, and appeals to the candor and sympathy of his fellows.

Kah we whaub o me da
Ne kau nug
Need juh
Nish e nau ba

Ka ke ka ne me kwain
Ne kau nug.

Behold me, Medas, my friends. Unishenauba, (or the common people.) Question me, my friends.

No. 4. Depicts the symbolical union of a Meda with a bird. He affects to have all space at his command, and to be gifted with powers of supernatural locomotion.

Ah wa nain
Ba bah mis saud
Ween jeeh
Un ish en au ba?

Who makes the Unishenauba, my fellows, walk about?

Be nais e wah
Ba bah mo saud
Wee jee ha
Unish en au ba.

The birds they make the Unishenauba, my fellows, walk about.

Number 5. Represents the union of a bird and an arrow, by a bird's body with an arrow's head. This is a boastful symbol for a hunter. He boasts in these words:—

Neen
Ba ba mis sa gahn
Nin goatsh
Ah wai see
Neen gah
Kwa tin ah wau.

I fly at will, and if I see an animal I can shoot him.

This comprehends one of the original hunter's *cartes*, or barks of inscription, with the text of the mnemonic chants. In the following synopsis the native words are omitted, but their literal import is given, together with the symbolic value of the figures, and their mnemonic import. Each Meda sings an independent verse.

6. I sit down in the meda's place — the Monedo lodge. (A Meda lodge.)

7. Two days must you fast, my friend — four days must you sit still. (Two marks on the breast, and four across the legs, denote time.)

8. Cast away your garments — throw them off. (He boasts of magic power.)

9. I am loaded with gifts — I sit down to rest. (The position denotes rest, the circle over the head a load.)

10. Who makes the people walk to feasts?—It is I. (A good hunter, denoted by a bird with an arrow's head.)

11. I shoot your heart! wary moose! I hit your heart. (A moose under enchantment.)

12. I cause myself to look like fire. (A bear enchanted.)

13. I can call water from above — from the heavens and from the earth. (Water symbolized by a dish on the head, filled.)

14. I have caused to look like the dead, a man — I have caused to look like the dead, a woman — I have caused to look like the dead, a child. (Human figure with the face crossed.)

15. I shine by night. (Symbol of the moon.)

16. A spirit is what I employ. (An arrow.)

17. Can any animal remain longer under the water than I? I am a beaver, and can keep under water longer than any. (A beaver.)

18. To myself I do good — to myself. (Abundance of goods denoted by the circle around the head, and the square to represent the female meda.)

19. I hear the words of your mouth, you are an evil spirit. (Hearing denoted by waving lines.)

20. The feather — the feather — it is the power. (A feather.)

21. I am the wild cat — I have just come up out of the ground. Who can master the wild cat? (A panther, or wild cat.)

22. A beast! What beast comes calling? — It is a deer is calling. (A deer.)

23. I am a spirit! what I have I give to you in your heart. (A spirit denoted by rays from the head — a meda by the rattle.)

24. His tongue, exclaiming, We go! A bear — his tongue! (A bear's tongue.)

25. Your own tongue kills you — it is your own. Bitter words denoted by an arrow pointed towards himself.)

26. Anything I can shoot with this medáwin — even a dog. I can kill with it. (A dog.)

27. What makes the long moon? What! I know not. (A crescent.)

28. I shoot thy heart, man. (An arrow in a heart.)

29. I can kill even the white loon. (An arrow in a loon.)

30. My friends — my friends * * * *. (Male figure.)

31. I open my wolf-skin, and the death-struggle must follow. (A bear.)

32. Now I wish to try my bird — once it had power. (A bird.)

33. I can kill any animal because thunder helps me. (A bird.)

34. I am rising. (Symbol of the sun.)

35. Who is a spirit? He that walks with a snake — walking on the ground — he is a spirit. (Human figure holding a serpent.)

36. He sat down, the great Manabozho, — his fire burns for ever. (Manabozho seated.)

37. Though you speak ill of me — it is above where my friends are. (A circle around the head to denote the influence he has in the sky.)

38. I walk through the sky. (Symbol of the moon.)

39. I think you enchant with the We-ne-ze-bug-oan. (A plant.)

40. Now I have something to eat. (Hand to mouth.)

41. Though he is a Monedo, I can by my arts take his body. (An arrow suspended in one hand.)

42. Now they will eat, my women!—Now I will bid them eat. (A circle around the abdomen to denote plenty.)

43. Come up, white crow. (A crow.)

44. I shrivel your heart up—that is my power. (An animal transpierced.)

45. I fill my kettle for the spirit. (A lodge and kettle.)

46. A long time since I laid myself down in the earth, ye were spirits. (A square and snake, to denote his residence in the earth.)

47. I open you for a bear. (A bear.)

48. A dead man's skin—it is a Monedo. (Death denoted by the want of head and hands.)

49. Were she on a distant island, I could make her swim over. (A circle to denote an island.)

50. What is this I employ to enchant? snake-skins? (A snake.)

51. Serpents are my friends. (A snake.)

52. I come up from below.—I come from above.—I see the Spirit.—I see beavers. (Symbol of a double death's-head.)

53. I can make an east wind pass over the ground. (A circle with three lines in the direction of latitude, and two marks at the North and South, in the place of the poles.)

In these devices, one of the most remarkable traits to be noticed, is the simplicity with which the metaphorical import is often conveyed. A waving line to denote air in motion, drawn from the ear, implies hearing or attention. To double the sign by embracing both ears, is full or perfect attention, and shows the devotion of the listener. A circle drawn around the body at the abdomen, denotes full means of subsistence; a sitting posture, rest. An elliptical line about the shoulders, symbolizes a pack or burthen, and implies the possession of goods. If a square be drawn to include the lower limbs, it is a symbol of the female *godaus* or coat, and denotes that the family also are provided with clothing. A dish, or semicircle, filled with water and placed on the head, denoted by short dashes, symbolizes the waters of the clouds, and implies power over them. A circle completely surrounding the head, denotes the immersion of it in the sky, and implies miraculous influences. A lodge and a kettle represent the preparation for a feast. A man's hand lifted to his mouth, denotes eating. An arrow symbolizes the direct power over life.

To denote the magic influence of the Meda over the animal creation, a line is invariably drawn in the figure from the mouth to the heart. Power over man is symbolized in the same manner. The heart is usually represented by a triangle, sometimes a square, and sometimes heart-shaped. These figures are, therefore, homopha-

STORY RECORD OF A CHIEF'S DISCUSSION HUNTING AND WAR

nous. The human face crossed, is used to denote the power of withdrawing life. The sun is represented as a rayed circle, with semicircles at two opposite sides, in the relative place of human ears; the moon, in the ordinary shape of the crescent. Night, as a finely crossed or barred sun, or circle with human legs. Vigilance, speed, and success in hunting, are symbolized by a human head appended to the body and stretched wings of a bird. If it be intended to represent superlative skill, the arrow is substituted as the head of this compound symbolical figure. An arrow held so as to direct the point inwards, is used to portray the self-acting effect of sharp words. The serpent appears in these as in all the Indian picture-writing, as the emblem of power and subtilty. It is the prime figure of their mythology, their superstitions, and their religion.

The subjoined figures, (Plate 54,) numbered from 1 to 17, comprise a pictorial record of a chief's success in hunting and war, with the means he employed. They are derived from the plains of the upper Missouri, and denote some peculiarities in the natural history of the country, with some slight variations in the style of drawing, but none, whatever, in the general principles of the pictorial art. The devices evince the same reliance on mystical or magical influences, exerted through the skill of their Meda-men; and the same ready resource of expressing the union of human and divine power by compound signs.

Number 1 is a meda. That fact is denoted by rays, or a kind of symbolic feathers from the head. Number 2 is the *accipencer spatularia*, or shovel-nosed sturgeon, a fish peculiar to the turbid waters of the South-west. Number 3 depicts a fort. Number 4, a plant of medicinal value. Number 5, a meda holding a charmed pipe with feathers. It is Number 1 in a new attitude, and he here records the success of his various efforts in hunting and in war. This is detailed in the remaining figures, from 6 to 17 inclusive. No. 6, drawn with an an arrow-point, instead of a head, to a human body, resting on the symbol for goods or burthens, implies his success in hunting, to which Number 7 is auxiliary. In Number 8, by the figure of the war-club, he records his skill in war. In Number 9, his mystical skipetagon or medicine-sack, with four magic birds, he denotes his power; and in the complex figure, Number 10, he claims to have taken the lives or scalps of forty men. Number 11 is a minor god called Manitose. It is the figure of an insect. In 12 and 13 he shows that his success over the buffalo and elk was owing to his skill in the meda. In Number 14 he reappears, clothed in a skin of a bear, as an exhibiter of necromantic tricks, and the remaining figures 15, 16, and 17, the beaver, catfish, and a fabulous animal which he depicts as having qualities of the brown bear and the hog, are depicted as results of his efficiency in the assumed character of the bear. The symbol Number 2 denotes his totem, and Number 3 the general area of his residence. The whole inscription was drawn on birch bark, in which form it could be circulated and read off or interpreted by his people. To each figure there is the verse of a song of skill or boasting.

In the next pictograph, same plate, the figures, numbered from 18 to 37, record another example of this rude kind of pictorial biography. The chief, Number 18, begins his efforts in fasting and tears. He represents himself, in Number 19, as uniting the speed of the feathered tribes and knowledge of the sky attributed to birds with great magic power. This is symbolized by the feathers which take the place of a human head on the figure. 20 represents a kind of fabulous reptile which was his totem or family arms. In 21 he denotes his power to be derived from an orbicular divinity, who is commonly called Mŏnedo Ininees, or the Little Man Spirit. In 22 he unites the power of 19 and 20 with the skill over life, denoted by the arrow-head in place of the human. By 23 he depicts the union between the Monedo of the Stickleback, drawn with a human heart, and himself, and in 24 repeats his power over and confidence in the wisdom of birds, before shown in 19. In 25, which is the figure of a bird, (his meda shipetagon, depicted with ears and an ornamented pipe-stem from its head,) he re-affirms his confidence in meda arts. 26 is the bat, an animal of mystic power, and one which realizes the Indian idea of a supernatural union between the human species and a beast and a bird.

Thus far his boasting is without results. In the next figure (27) he appears fasting, tears dropping from his eyes, and he now kills a bear (28). His general location is shown by 29. In 30, he shows the extraordinary power and wisdom of the serpent, in prying into divine affairs. The heads of two serpents are therefore depicted as reaching above the sky. 31 is a modified form of 20. In 32, having traits of a quadruped, a bird and a fish, and in 33, a turtle, he gives further proofs of the power of his local gods, or spirits. There is, in his view, remarkable success both in hunting and war. But he now appears in the character of a pacificator, extending the ornamented pipe-stem, (35,) and smoking the pipe of peace (34). The two remaining signs are merely suffixed. 36 denotes the distribution of presents, and 37 the means of feasting, the result of a public negotiation.

7. The Higher Jeesukawin, or Sacred Prophetic Art.

Pictorial Devices employed in communicating the Responses of the Deity; — The Symbols of the Prophet Chusco; — Vision of Catherine, the Prophetess of Chegoimegon, recorded in Symbolic Characters; — Narrative of the Origin of these Devices, and why adopted, as given by herself; — Visit of an Orbicular Spirit to the Lodge of Fasting; — Results of the first Instance of the exercise of her Art; — Specimens of the Hieratic or higher Prophetic Songs; — Hymns to the Sun.

G. Sacred Jeesukawin. — There is no art of higher pretensions to supernatural or divine power, among the professors of the Indian mysteries, than those which are made in the exhibitions of the sacred Jeesukáwin. It is the ancient art of the seer

or prophet, which has been noticed as existing among all these tribes, from the earliest period of their discovery. To jeesuká, in the language of the Odjibwas, is to mutter or peep. The word is taken from the utterance of sounds of the human voice, low on the ground. This is the position in which the response is made by the seer or prophet, who is called jossakeed. Powwow was a term of precisely the same import, used in the respective eras of the settlement of Virginia and of New England. Every tribe has a word to denote the same act, or art, and this term is inflected or varied according to the principles of the different languages, to distinguish the actor from the act, and from the place of the act, or lodge. Thus, jeesuká, (to prophesy,) in the language above denoted, is rendered a noun by the inflection win, making jeesukáwin (prophecy). To denote the actor, the sound of the letter *d* is added to the first person singular of the infinitive, and, by a rule of the permutation of the vowels, in making nouns personal from nouns impersonal, the long sounds of e and a are changed to o and e, making jossakeed, a prophet or seer. To describe the lodge, the first person of the infinitive singular is inflected by un, at the same time the sound of a is changed to au, rendering the word jeesukaun (a prophet's lodge).

To prepare the operator in these mysteries, for answering questions, a lodge is erected by driving stout poles, or saplings, in a circle, and swathing them round tightly from the ground to the top with skins, drawing the poles closer at each turn or wind, so that the structure represents a rather acute pyramid. The number of poles is prescribed by the jossakeed, and the kind of wood. There are, sometimes, perhaps generally, ten poles, each of a different kind of wood. When this structure has been finished, the operator crawls in, by forcing his way under the skin at the ground, taking with him his drum, and scarcely anything beside. He begins his supplications by kneeling and bending his body very low, so as almost to touch the ground. When his incantations and songs have been continued the requisite time, and he professes to have called around him the spirits, or gods, upon whom he relies, he announces his readiness to the assembled multitude without, to give responses. And no ancient oracle of heathen mysticism — not even "Diana of the Ephesians," ever more completely riveted the popular belief, than do these modern oracles among the North American tribes.

The following pictographic signs, used in this art, represented in Plate 49, B, comprise the spirits, or gods, relied upon by a noted prophet of the Ottowas, called Chusco.[1] They were drawn on paper from his description, at a period when he had, in his own words, "thrown these symbolic devices away," and united himself to a Christian mission church. They do not, therefore, fully show, but rather imitate the Indian method of drawing, are not intended to copy it, and are only given as exhibiting the mode of denoting power or divinity. He was, at this time, nearly 70; he did

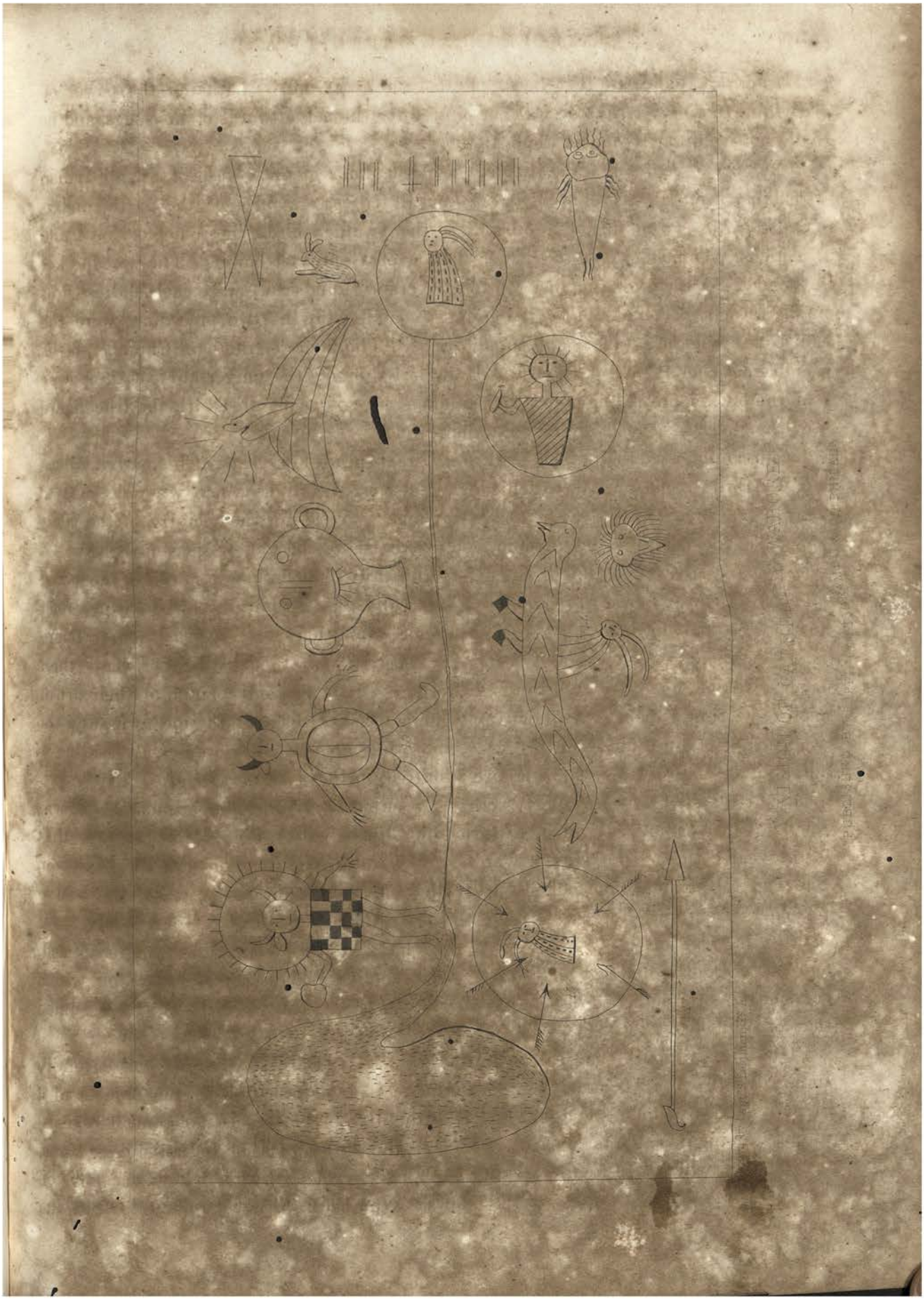
[1] A term derived from Wazhusk, a muskrat.

not hesitate to declare that he supplicated the great impersonation of the power of Evil, in these mysteries; he was not pressed for the actual words of his songs, and he did not, voluntarily, repeat them.

Number 1 represents the turtle, an object held in great respect, in all Indian reminiscence. It is believed to be, in all cases, a symbol of the earth, and is addressed as a mother. Number 2 is the swan, a bird whose noble shape and motions, commend it, as the impersonation of a spiritual power. The woodpecker (number 3,) the crow (number 4,) and the crane (number 5,) were each addressed as objects of a peculiar and benign influence, and, with the two preceding, were the objects of his incantations and supplications. The figure of the hand (number 6,) is emblematic of the prophetic art. Half-Circles denote the universality of the power of the bird or animal figured. The Indians are not acquainted with the true figure of the globe, but depict the sky as a half-circle.

Chusco practised the prophet's art, for a great number of years, at his native village of L'Arbre Croche, on Lake Michigan, and also at Michillimackinac, where he died, at an advanced age, in 1838. There also came to reside in the vicinity of the latter place, a prophetess, from Chegoimegon, on the shores of Lake Superior. She was a descendant, in a direct line, from one of the principal Chippewa families, the noted Wabojeeg, who was the ruling chief in that quarter. Pictorial devices, which refer to the Jeesukáwin, have been less easily accessible than any other branch. There is a feeling of sacredness and secrecy connected with them, which prevents their being revealed, even to the uninitiated Indians. It is the only branch of their art of picture-writing, which is withheld from common use. Signs of the medáwin, and the wábeno; — of hunting, sepulture, war, and other objects, are more or less known to all, and are accessible to all, who are admitted to the secret societies. But the prophetic art exists by itself. It is exclusive, peculiar, personally experimental. It was owing to the same fact, which had brought Chusco within the pale of inquiry, *that* also revealed the gods of OGEE-WY-AHN-OQUT-O-KWA, or the prophetess of Chegoimegon. She had felt and acknowledged the truth of the exhortations of one of the native preachers from the shores of Lake Ontario, in Canada, the noted John Sunday, and had united herself to a missionary church. At this period, she was baptized, and subsequently married an Indian convert, called Wabose, or the Hare, on which occasion she relinquished her former name of Ogeewyahnoquot Okwa, and assumed that of Wabose.

Plate 55 exhibits the gods of Catherine Wabose, as drawn by herself, and carefully transcribed from a larger sheet. This curious pictograph depicts the objects of a sacred vision, to which she looks back as the date of her revelations, and it reveals, at once, a singular chapter in the art of symbolic writing, and of Indian superstitions. The figures, which will be more fully explained by the narrative which she gave of her early devotion to this art, are as follows: Number 2. Ogeewyahnoquot Okwa, the



Prophetess. The marks at Number 3 denote the number of days of her initiatory fast, the day of her vision being marked with a cross. Number 4 represents the path of her aerial visit. Number 6, the moon, with a lambent flame. Number 9, the everlasting standing woman. Number 10, the Little Man-spirit. Number 11, Oshawanegeezhig, or the bright blue sky. Number 12, the upper heavens. Number 15, the trial of prickles. Number 13, a kind of fabulous fish. Number 8, the sun. Number 18, an orbicular spirit resembling a flying woodpecker. Number 19 is the symbol of her present name. Number 20, a kind of fish. Number 16, a symbol of harm.

Catherine Wabose, the name prefigured by Number 19, was still living at the last accounts. She is a female of a good natural intellect, great shrewdness of observation, and some powers of induction and forecast, living amid mixed clans who are not characterized by either. She was far superior, in these respects, to the aged Ottowa prophet, Chusco, whose secret devices are given above. In order to understand the force and character of her delineations, it was deemed important to obtain the history of the operations of her mind under the influence of her primary periodical fast. This she related in the Indian tongue to Mrs. Schoolcraft, who took it down from her lips in the following words. The name of Catherine, it may be premised, was given to her on her being baptized as a member of the Methodist church. It is owing to this act, indeed, and her being convinced of the error of the Jeesukáwin in all its forms, that we are indebted for the revelation of her prophetical experience.

"When I was a girl," she said, "of about twelve or thirteen years of age, my mother told me to look out for something that would happen to me. Accordingly, one morning early, in the middle of winter, I found an unusual sign, and ran off as far from the lodge as I could, and remained there until my mother came and found me out. She knew what was the matter, and brought me nearer to the family lodge, and bade me help her in making a small lodge of branches of the spruce tree. She told me to remain there, and keep away from every one, and, as a diversion, to keep myself employed in chopping wood, and that she would bring me plenty of prepared bass-wood bark to twist into twine. She told me she would come to see me in two days, and that, in the mean time, I must not even taste snow.

"I did as directed. At the end of two days she came to see me. I thought she would surely bring me something to eat, but, to my disappointment, she brought nothing. I suffered more from thirst than hunger, though I felt my stomach gnawing. My mother sat quietly down and said, (after ascertaining that I had not tasted anything, as she directed,) 'My child, you are the youngest of your sisters, and none are now left me of all my sons and children, but you four,' alluding to her two elder sisters, herself, and a little son, still a mere lad. 'Who,' she continued, 'will take care of us poor women? Now, my daughter, listen to me, and try to obey. Blacken your face and fast really, that the Master of Life may have pity on you and me, and

on us all. Do not in the least deviate from my counsels, and in two days more I will come to you. He will help you, if you are determined to do what is right, and tell me whether you are favored or not, by the true Great Spirit; and if your visions are not good, reject them.' So saying, she departed.

"I took my little hatchet and cut plenty of wood, and twisted the cord that was to be used in sewing ap-puh-way-oon-un, or mats, for the use of the family. Gradually I began to feel less appetite, but my thirst continued; still I was fearful of touching the snow to allay it, by sucking it, as my mother had told me that if I did so, though secretly, the Great Spirit would see me, and the lesser spirits also, and that my fasting would be of no use. So I continued to fast till the fourth day, when my mother came with a little tin dish, and filling it with snow, she came to my lodge, and was well pleased to find that I had followed her injunctions. She melted the snow, and told me to drink it. I did so, and felt refreshed, but had a desire for more, which she told me would not do, and I contented myself with what she had given me. She again told me to get and follow a good vision; a vision that might not only do us good, but also benefit mankind, if I could. She then left me, and for two days she did not come near me, nor any human being, and I was left to my own reflections. The night of the sixth day I fancied a voice called to me, and said, 'Poor child! I pity your condition; come, you are invited this way;' and I thought the voice proceeded from a certain distance from my lodge. I obeyed the summons, and, going to the spot from which the voice came, found a thin shining path, like a silver cord, which I followed. It led straight forward, and, it seemed, upward (No. 5). After going a short distance, I stood still, and saw on my right hand the new moon, with a flame rising from the top like a candle, which threw around a broad light (No. 6). On the left appeared the sun, near the point of its setting (No. 8). I went on, and I beheld on my right the face of Kau-ge-gay-be-qua, or the everlasting standing woman, (No. 5,) who told me her name, and said to me, 'I give you my name, and you may give it to another. I also give you that which I have, life everlasting. I give you long life on the earth, and skill in saving life in others. Go, you are called on high.'

"I went on, and saw a man standing, with a large circular body, and rays from his head, like horns. (No. 6.) He said, 'Fear not; my name is Monido-Wininees, or the Little Man-spirit. I give this name to your first son. It is my life. Go to the place you are called to visit.' I followed the path till I could see that it led up to an opening in the sky, when I heard a voice, and standing still, saw the figure of a man standing near the path, whose head was surrounded with a brilliant halo, and his breast was covered with squares. (No. 11.) He said to me, 'Look at me; my name is O-Shau-wau-e-geeghick, or the Bright Blue Sky. I am the veil that covers the opening into the sky. Stand and listen to me. Do not be afraid. I am going to endow you with gifts of life, and put you in array that you may withstand and endure.' Immediately I saw myself encircled with bright points, which rested

against me like needles, but gave me no pain, and they fell at my feet. (No. 9.) This was repeated several times, and at each time they fell to the ground. He said, 'Wait, and do not fear, till I have said and done all I am about to do.' I then felt different instruments, first like awls, and then like nails, stuck into my flesh, but neither did they give me pain, but, like the needles, fell at my feet as often as they appeared. He then said, 'That is good,' meaning my trial by these points; 'you will see length of days. Advance a little farther,' said he. I did so, and stood at the commencement of the opening. 'You have arrived,' said he, 'at the limit you cannot pass. I give you my name; you can give it to another. Now, return! Look around you. There is a conveyance for you. (No. 13.) Do not be afraid to get on its back, and when you get to your lodge, you must take that which sustains the human body.' I turned, and saw a kind of fish swimming in the air, and getting upon it as directed, was carried back with celerity, my hair floating behind me in the air. And as soon as I got back, my vision ceased.

"In the morning, being the sixth day of my fast, my mother came with a little bit of dried trout. But such was my sensitiveness to all sounds, and my increased power of scent, produced by fasting, that before she came in sight I heard her while a great way off; and when she came in I could not bear the smell of the fish, or herself either. She said, 'I have brought something for you to eat, only a mouthful, to prevent your dying.' She prepared to cook it, but I said, 'Mother, forbear, I do not wish to eat it — the smell is offensive to me.' She accordingly left off preparing to cook the fish, and again encouraged me to persevere, and try to become a comfort to her in her old age and bereaved state, and left me.

"I attempted to cut wood as usual, but in the effort I fell back on the snow from exhaustion, and lay some time; at last I made an effort and rose, and went to my lodge and lay down. I again saw the vision, and each person who had before spoken to me, and heard the promises of different kinds made to me, and the songs. I went the same path which I had pursued before, and met with the same reception. I also had another vision, or celestial visit, which I shall presently relate. My mother came again on the seventh day, and brought me some pounded corn boiled in snow water, for, she said, I must not drink water from lake or river. After taking it I related my vision to her. She said it was good, and spoke to me to continue my fast three days longer. I did so: at the end of which she took me home, and made a feast in honor of my success, and invited a great many guests. I was told to eat sparingly, and to take nothing too hearty or substantial; but this was unnecessary, for my abstinence had made my senses so acute, that all animal food had a gross and disagreeable odor.

"After the seventh day of my fast, (she continued,) while I was lying in my lodge, I saw a dark round object descending from the sky, like a round stone, and enter my lodge. As it came near I saw that it had small feet and hands like a human body. It spoke to me, and said, 'I give you the gift of seeing into futurity, that you may

use it for the benefit of yourself and the Indians — your relations and tribes-people.' It then departed, but as it went away it assumed wings, and looked to me like the red-headed woodpecker in flight.

"In consequence of being thus favored, I assumed the arts of the Jeesukáwin, and a prophetess, but never those of a Wabeno. The first time I exercised the prophetical art was at the strong and repeated solicitations of my friends. It was in the winter season, and they were then encamped west of the Wisacoda, or Brule river of Lake Superior, and between it and the plains west. There were, besides my mother's family and relatives, a considerable number of families. They had been some time at the place, and were near starving, as they could find no game. One evening the chief of the party came into my mother's lodge. I had lain down, and was supposed to be asleep, and he requested of my mother that she would allow me to try my skill to relieve them. My mother spoke to me, and after some conversation, she gave her consent. I told them to build the *Jee-suk-aun*, or prophet's lodge, *strong*, and gave particular directions for it. I directed that it should consist of ten posts or saplings, each of a different kind of wood, which I named. When it was finished, and tightly wound with skins, the entire population of the encampment assembled around it, and I went in, taking only a small drum. I immediately knelt down, and holding my head near the ground in a position, as near as may be, prostrate, began beating my drum, and reciting my songs or incantations. The lodge commenced shaking violently, by supernatural means. I knew this by the compressed current of air above, and the noise of motion. This being regarded by me and by all without as a proof of the presence of the spirits I consulted, I ceased beating and singing, and lay still, waiting for questions, in the position I had at first assumed.

"The first question put to me was in relation to the game, and where it was to be found. The response was given by the orbicular spirit, who had appeared to me. He said, 'How short-sighted you are! If you will go in a *west* direction you will find game in abundance.' Next day the camp was broken up, and they all moved *westward*, the hunters, as usual, going far ahead. They had not proceeded far beyond the bounds of their former hunting circle when they came upon tracks of moose, and that day they killed a female, and two young moose nearly full-grown. They pitched their encampment anew, and had abundance of animal food in this new position.

"My reputation was established by this success, and I was afterwards noted in the tribe in the art of a Meda-woman, and sung the songs which I have given to you. About four years after, I was married to O Mush Kow Egeezhick, or the Strong Sky, who was a very active and successful hunter, and kept his lodge well supplied with food; and we lived happy. After I had had two children, a girl and a boy, we went out, as is the custom of the Indians in the spring, to visit the white settlements. One night, while we were encamped at the head of the portage at Pauwating, (the Falls of St. Mary's,) angry words passed between my husband and a half-Frenchman named

Gaultier, who, with his two cousins, in the course of the dispute, drew their knives and a tomahawk, and stabbed and cut him in four or five places, in his body, head, and thighs. This happened the first year that the Americans came to that place, (1822.) He had gone out, at a late hour in the evening, to visit the tent of Gaultier. Having been urged by one of the trader's men to take liquor that evening, and it being already late, I desired him not to go, but to defer his visit till next day; and, after he had left the lodge, I felt a sudden presentiment of evil, and I went after him, and renewed my efforts in vain. He told me to return, and as I had two children in the lodge, the youngest of whom, a boy, was still in his cradle, and then ill, I sat up with him late, and waited and waited, till a late hour, and then fell asleep from exhaustion. I slept very sound. The first I knew was a violent shaking from a girl, a niece of Gaultier's, who told me my husband and Gaultier were all the time quarrelling. I arose, and went up the stream to Gaultier's camp-fire; it was nearly out, and I tried to make it blaze. I looked into his tent, but all was dark, and not a soul there. They had suddenly fled, although I did not, at the moment, know the cause. I tried to make a light to find my husband, but could find nothing dry, for it had rained very hard the day before. After being out a while my vision became clearer, and, turning toward the river side, I saw a dark object lying near the shore, on a grassy opening. I was attracted by something glistening, which turned out to be his ear-rings. I thought he was asleep, and in stooping to awake him I slipped, and fell on my knees. I had slipped in his blood on the grass, and, putting my hand on his face, found him dead. In the morning the Indian agent came with soldiers from the fort to see what had happened, but the murderer and all his bloody gang of relatives had fled. The agent gave orders to have the body buried in the old Indian burial-ground below the Falls.

"My aged mother was encamped about a mile off at this time. I took my two children in the morning, and fled to her lodge. She had just heard of the murder, and was crying as I entered. I reminded her that it was an act of Providence, to which we must submit. She said it was for me and my poor helpless children that she was crying — that I was left, as she had been years before, with nobody to provide for us. With her I returned to my native country at Chegoimegan on Lake Superior."

The preceding narrative is taken from the verbal relation of Catherine Wabose, or Ogeewyahnackwut Oquay, who is now in about the forty-first year of her age. A few facts may be added to indicate the steps by which she finally renounced a reliance on these mystical ceremonies, and was led to communicate the information, together with the kekenowin of her visions, and songs subjoined. In the third year after the assassination of her first husband, she married Minanockwut, or the Fair Cloud, his half-brother, by whom she had two children, both daughters. He was in a few years attacked with a complaint of the head, which affected his reason, and of which he died. It was in the winter season that this happened, and as they were inland at their sugar camp, she, with the aid of her children, placed the corpse on a hand-sled,

and drew it many miles through the woods to the river's banks, that he might be buried with his tribe.

She was still called to bear other trials in the course of a few years, which would have broken down a mind of less native strength than hers. Her son, by Strong Sky, sickened at an age when he began to be useful, and after lingering for a time, died. A day or two before his departure, he related to her such a dream of the Great Spirit, as He is known and worshipped by the whites, and of his being clothed by him with a white garment, that her mind was much affected by it, and led to question in some measure, the soundness of her religious views. Not long afterwards one of her little daughters was also removed by death, and according to her own apt interpretation of a part of her virginal vision, she seemed, indeed, to be pricked with metallic points. While these dispensations rested deeply on her mind, and she felt herself to be the subject of afflictions which appeared to have an ulterior object, the Odjibwa evangelist, John Sunday, visited that part of the country, and explained to her the doctrine of a better revelation, which came, indeed, "from above," and under his teaching, she renounced the calling of a prophetess, which she had so long practised, and became a member of the Methodist Episcopal church, and was baptized by the name of Catherine. She says, that the wine she partook of at the communion-table at that time, and at subsequent times, is the only form of spirits she has ever tasted. Her trials were not, however, at an end, though they were mitigated by reflections of a consolatory character. The spring of 1836 developed, in the constitution of her eldest daughter and child, Charlotte Jane, a rapid consumption, which brought her in the month of April to her grave, in her seventeenth year. This young girl exhibited very amiable traits of character, united with an agreeable person. She was taken into my family, after the assassination of her father, in 1822, and educated and instructed under the personal care of Mrs. Schoolcraft, who cherished her as a tender plant from the wilderness. When she had mastered her letters, her catechism, and the commandments, at an early age, she was led on by degrees, from one attainment to another in moral knowledge, till she had acquired the intelligence and deportment, which fitted her to take her place in civilized life. She united with the Presbyterian church at Michillimackinac, and is buried in its precincts, having exhibited to the end of her life very pleasing and increasing proofs of her reliance upon, and acceptance by a crucified Redeemer.

Prior to the death of her daughter, Catherine had married her third husband, in Nau-We-Kwaish-kum, alias James Wabose, an Odjibwa, who was also, and continues to be a member of the Methodist society. By this marriage she had two children, both males, the loss of one of whom has been added to the number of her trials. But the only effect of this bereavement was to strengthen her faith, and by daily renewals of her confidenee in the Saviour to establish herself in piety.

These particulars, it is conceived, will afford a clear and satisfactory chain of

evidence of the truth of her narrative, and the reasons why she has been willing to impart secrets of her past life which have heretofore been studiously concealed, as she remarks, even from her nearest friends.

The following comprises an explanation of her Kekenowin (Plate 55), which have been mentioned in the account of her vision:—

Figure 1. A lodge of separation and fasting.
" 2. Ogeewyahn akwut oquay.
" 3. Denotes the number of days she fasted.
" 4. The day on which the vision appeared.
" 5. The point from which the first voice proceeded, and the commencement of the path she pursued.
" 6. The new moon, with a lambent flame.
" 7. The sun, near its approach to the horizon.
" 8. The figure of a man in the sun, holding some object which she did not recognize, but supposes to have been a book.
" 9. The head of a female spirit called Kaugegaybekwa, or the Everlasting Woman.
" 10. A male spirit, called Monedowininees, or the Little Spirit Man.
" 11. The principal spirit revealed to her, called Ozhawwunuhkogeezhig, or the Blue Sky.
" 12. An orifice in the heavens, called Pug-un-ai-au-geezhig.
" 13. A nondescript fish prepared to carry her back.
" 14. Ogeewyahn ackwut oquay, sitting on the fish.
" 15. The ultimate point attained by her in her bright path leading to the sky, where she underwent the trial of symbolical prickles.
" 16. A magic arrow.
" 17. Symbol of a woodpecker.
" 18. Symbol of her husband's name.
" 19. Symbol of the catfish.

The subjoined specimens of her hieratic songs and hymns are taken down verbatim. It is a peculiarity observed in this and other instances of the kind, that the words of these chants are never repeated by the natives without the tune or air, which was full of intonation, and uttered in so hollow and suspended, or inhaled a voice, that it would require a practised composer to note it down. The chorus is not less peculiarly fixed, and some of its guttural tones are startling. These hymns are to be read from top to bottom.

Prophetic Powers.

1.

Wi	Wa	Wi	Wa
Ya	Win	Ya	Win
Kwa	Dah	Kwa	Dah
Yaug	Go	Yaug	Go
Gee	Je	Gee	Je
Zhik	Naun	Zhik	Naun
Au	In	Au	In
	A		A (Repeat.)

At the place of light—
At the end of the sky—
I (the Great Spirit)
Come and hang
Bright sign.

(Chorus of strongly accented and deeply uttered syllables.)

2.

Yau	Yau
Ne	Ne
Mud	Mud
Wa	Wa
Aus	Aus
Se	Se
Doan	Doan
Ain	Ain
Yaun	Yaun (Repeat.)

Lo! with the sound of my voice,
(The prophet's voice)
I make my sacred lodge to shake—
(By unseen hands my lodge to shake,)
My sacred lodge.
Chorus, &c.

3.

Haih!	Wau	Zhik
Wau	Nah	A.
Bish	Kwud	

Kau Oong.
Gau Haih.
Gee Gee (Repeat.)

Haih! the white bird of omen,
He flies around the clouds and skies—
(He sees,—unuttered sight!)
Around the clouds and skies—
By his bright eyes I see—I see—I know.
Chorus, &c.

The following chants embody the responses of the Deity invoked. They sufficiently denote a fact, which has indeed obtruded itself in other instances, that the sun is not only often employed as a symbol of the Great Spirit, but is worshipped, also, as the Great Spirit himself.

1. *Chants to the Deity.*

1.

Och auw naun na wau do
Och auw naun na wau do
Och auw naun na wau do
Och auw naun na wau do.
Heh! heh! heh! heh!
I am the living body of the Great Spirit above,
(The Great Spirit, the Ever-living Spirit above,)
The living body of the Great Spirit,
(Whom all must heed.)
(Sharp and peculiar chorus, untranslatable.)

2.

Mish e mon dau kwuh
Mish e mon dau kwuh
Ne maun was sa hah kee
Ne maun was sa hah kee.
Way, ho! ho! ho! ho!
I am the Great Spirit of the sky,
The overshadowing power,
I illumine earth,
I illumine heaven.
(Slow, hollow, peculiar chorus.)

3.

Ah wauh wa naun e dowh
Ah wauh wa naun e dowh
Ah wauh wa naun e dowh
Ah wauh wa naun e dowh.
Way, ho! ho! ho! ho!
Ah say! what Spirit, or Body, is this Body?
(That fills the world around,
Speak, man!) ah say!
What Spirit, or Body, is this Body?
(Chorus as in the preceding, with voice and drum.)

2. *Hymns to the Sun.*

4.

Kee zhig maid wa woash kum aun
Kee zhig maid wa woash kum aun. (Repeat four times.)
A! a! a! ha! aha!
The sky or day I tread upon, that makes a noise.
(I Ge Zis — Maker of light.)

5.

Wain je gwo dow aid, gee zhick o ka
Ap pe wain ah ge me e go yaun.
A! a! a! ha! aha!
The place where it sinks down — the maker of day.
When I was first ordained to be. (I Ge Zis.)

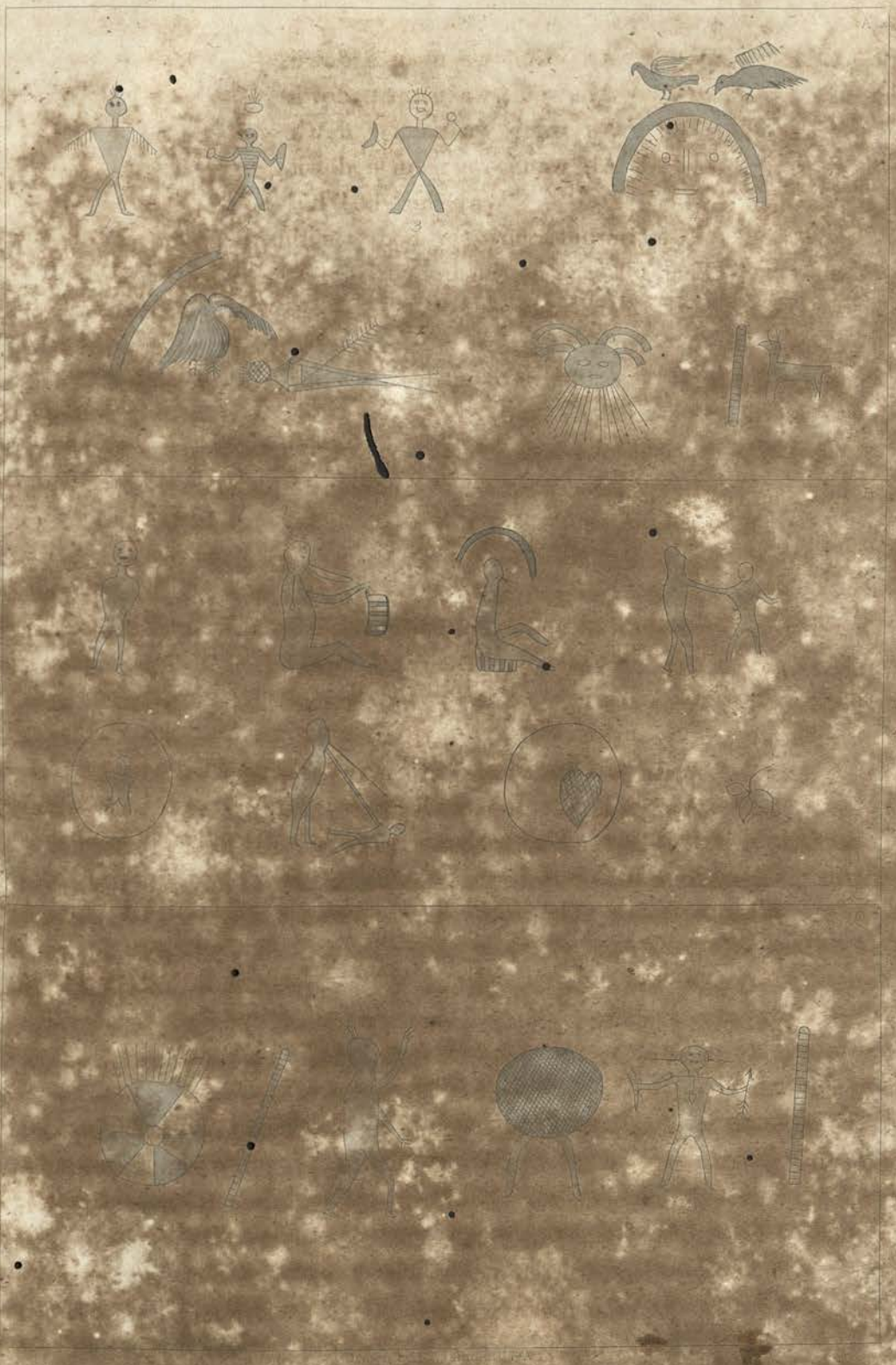
3. *In the Medáwin.*

6.

Nim ba na see wa yaun e
Nim ba na see wa yaun e. (Repeat four times.)
A! a! a! ha! aha!
My bird's skin — my bird's skin, &c.

7.

Ning ga kake o wy aun a
Ning ga kake o wy aun a (Repeat four times.)
Ap pee i aun je ug wa.
A! a! a! ha! aha!
My hawk's skin — my hawk's skin,
The time I transformed it, &c.



4. *To the Great Spirit.*

8.

In ah wau how mon e do
In ah wau how mon e do
I au au jin ind
Gee zhik oong a bid. (Repeat four times.)
A! a! a! ha! aha!

Look thou at the Spirit. It is he that is spoken of who stays our lives — who abides in the sky.

Such is the Indian system of the higher Jeesukáwin. To speak, as it were, from the secrecy of the Indian mind, the symbols illustrative of its superstitions, requires perseverance of investigation, under the most favorable circumstances. Questions which are resisted in one form, or in a particular frame of mind, on the part of the respondent, may be successfully replied to, under other phases of feeling, or caution, or suspicion. Pride of opinion, and of consistency, is as obstinate in the Indian as in the European mind, but is more difficult to conquer, in proportion as it is left in its original state of darkness, or error. Even where Christianity has apparently given new grounds to hope, and modified its original views of life, if not radically changed them, there is still a bias in favor of these superstitious rites, which is very perceptible.

8. Symbols of War, Love, and History.

Symbolic Figures in the Departments of the War Dance, and of Love. — Translation of a Love Song and two War Songs. — Further examples of these Devices. — Their ultimate and most permanent mode of employment in recording Historical Events, in the Inscriptions, called Muzzinabikon. — Account of two separate Inscriptions from the Banks of Lake Superior, recording the crossing of that Lake, by a War Party, in Canoes, led by Myeengun. — Symbolic Alphabet of the Kekewin and the Kekenowin.

H. Nundobunewin, or War. — The devices used to commemorate the incidents of war, among the northern tribes, will now be brought forward. Most of these are employed to excite the memory in the recital of songs preparatory to the setting out of war parties. It will be seen by the annexed figures, that these devices are chiefly of the ke-ke-no-win, or highest grade of the symbolic.

The figures from 1 to 4, Plate 56, C., comprise what is deemed a continuous song, and although each stanza of it may be sung by a separate individual, the general theme is preserved. Figure 1 represents the sun, which is to be regarded in this connection as not only the source of light and knowledge to men, but a symbol

of vigilance. The warrior merely sings — I am rising. In figure 2 he assumes to possess this power himself, and by one hand pointing to the earth, and another extended to the sky, declares his wide-spreading power and fearful prowess. He sings, I take the sky — I take the earth. In number 3 he appears under the symbol of the moon, denoting the night to be the season of secrecy and warlike enterprise. With a proud feeling of exaltation, he sings — I walk through the sky. In figure 4 he personifies Venus, here called the Eastern Woman, or the Evening Star, who is thus appealed to, as a witness of his valor and warlike cunning. He sings, The Eastern Woman calls. The entire song as thus expressed, in the native dialect, is this:

1st War Song.

1. Tshe be moak sa aun.
2. Ma mo yah na geezhig
   Ma mo yah, na ahkee
   Mo mo yah na.
3. Bai mo sa yah na, geezhigong
   Bai mo sa yah na.
4. Wa bun ong tuz-ze kwai
   Ne wau ween, ne go ho ga.

Divested, in some degree, of its symbolic shape, the verses may be read thus:

1. I am rising to seek the war-path.
2. The earth and the sky are before me.
3. I walk by day and by night.
4. And the evening star is my guide.

In the ensuing six figures, (A, Plate 56,) a like unity of theme is preserved. Figure 1 personifies an active and swift-footed warrior; he is therefore depicted with wings. He sings, — I wish to have the body of the swiftest bird. In No. 2 he is represented as standing under the morning star, which, as a sentinel, is set to watch, or should terminate his nocturnal enterprise. He sings, — Every day I look at you; the half of the day I sing my song. In No. 3, he is depicted as standing under the centre of the sky, with his war-club and rattle. He sings, — I throw away my body. In figure 4, the eagle, a symbol of carnage, is represented as performing the circuit of the sky. He sings, — The birds take a flight in the air. In figure 5, he imagines himself to be slain on the field of battle. He sings, — Full happy am I to be numbered with the slain. And in figure 6, he consoles himself with the idea of posthumous fame, under the symbol of a spirit in the sky. He sings, — The spirits on high repeat my name.

2d War-Song.

1. I wish for the speed of a bird, to pounce on the enemy.
2. I look to the morning star to guide my steps.

3. I devote my body to battle.
4. I take courage from the flight of eagles.
5. I am willing to be numbered with the slain.
6. For even then my name shall be repeated with praise.

It is not deemed necessary to encumber these pages with the native words, which are before me, nor with any farther attempt to disencumber them from their symbolic meanings. The system adopted in the preceding song will apply to this, and to all others, which shall be selected with similar care and symbolic propriety in the arrangement. By this method, these songs, which have been usually exhibited as meagre and disjointed portions of rhapsodies, are shown to have a consistency and import which may well be supposed to inspire the singer with martial warmth, and prepare his mind for deeds of daring. The symbolic pictures form, indeed, the true key to the nug-a-moon-un, or songs, and show to what extent the mnemonic symbols are applied.

I. SAGEAWIN, OR LOVE.—As a proper appendage to this part of the inquiry, I subjoin the seven following mnemonic symbols of love. (B, Plate 56.) The subject is one which will scarcely bear to be treated of at much length, for which, indeed, but little space can be assigned, and yet, without some allusion to it, there would be manifestly a branch of the inquiry, and not an unimportant one, wanting. And here also, as in war, in the meda, and in the symbols of hunting, the theme is to be regarded as unbroken.

LOVE-SONG.

Figure 1 represents a person who affects to be invested with a magic power to charm the other sex, which makes him regard himself as a monedo, or god. He depicts himself as such, and therefore sings—It is my painting that makes me a god. In No. 2, he further illustrates this idea by his power in music. He is depicted as beating a magic drum. He sings—Hear the sounds of my voice, of my song; it is my voice. In No. 3, he denotes the effects of his necromancy. He surrounds himself with a secret lodge. He sings—I cover myself in sitting down by her. In No. 4, he depicts the intimate union of their affections, by joining two bodies with one continuous arm. He sings—I can make her blush, because I hear all she says of me. In No. 5, he represents her on an island. He sings—Were she on a distant island, I could make her swim over. In No. 6, she is depicted asleep. He boasts of his magical powers, which are capable of reaching her heart. He sings—Though she was far off, even on the other hemisphere. Figure 7 depicts a naked heart. He sings—I speak to your heart. Still further divested of their symbolic dress, and relieved of some points of peculiarity, the entire nugamoon may be thus read:

1. It is my form and person that makes me great.
2. Hear the voice of my song—it is my voice.

3. I shield myself with secret coverings.
4. All your thoughts are known to me — blush!
5. I could draw you hence, were you on a distant island;
6. Though you were on the other hemisphere.
7. I speak to your naked heart.

That the system of mnemonic symbols may be clearly understood, and the kind of aid which it imparts to the memory appreciated, it is applied, in the following example, to the eight verses of the latter part of the 30th of Proverbs, from the 25th to the 32d inclusive. The English version of these, being in every one's hand, need not be quoted. The following is their translation in that now rare and extraordinary effort of literary-mission labor, Eliot's Bible in the Massachusetts language.

Verse 25. Annunekqsog missinnaog matta manuhkesegig, qut onch quaquoshwetamwog ummeetsuong au oo nepunae.

26. Ogkoshquog nananoochumwesuog, qut onch weekitteaog qussukquanehta.

27. Chansompsog wanne ukeihtassootamooeog, qut onch sohhamwog nag wame moeu chipwushaog.

28. Mamunappeht anunuhqueohts wunnutchegash, kah appu tahsootamukkomukqut.

29. Nishwinash nish wanumaushomoougish nux yauunash tapeunkgshaumooash.

30. Quonnonu noh anue menuhkesit kenugke puppinashimwut, kah matta qushkehtauoou howausinne.

31. Quohgunonu, nomposhimwe goats wonk, kah ketasioot, noh wanue kowan ayeuuhkone waabehtauunk.

32. Mattammagwe usseas, tah shinadtkuhhog, asah matanatamas, ponish kenutcheg kuttoonut.

The symbolic figures represented in A, Plate 47, may be put to denote the import of the principal object of each verse, the symbol being taken as the key.

Number 25. An ant.
" 26. A coney.
" 27. A locust.
" 28. A spider.
" 29. A river — a symbol of motion.
" 30. A lion.
" 31. A greyhound. 2. A he-goat. 3. A king.
" 32. A man foolishly lifting up himself to take hold of the heavens.

It must be quite evident that while this primitive mode of notation is wholly inadequate to the purpose of recording sounds, any farther than the mere *names* of the objects prefigured by the key-picture, yet, the words themselves having been previously committed to memory, these key-pictures are a strong aid and stimulant to the

memory. This is precisely the scope and object of the Indian bark pictographs and "music boards," and other modes of drawings intended to denote songs or chants. And where many such are to be sung, as is the case with the Medas and singers in their public ceremonies, the songs being generally short, it may be conceived to be a system of much utility to them. It is, at once, their book and musical scale.

K. MUZZINABIKON, ROCK-WRITING OR HISTORY.—The application of picture-writing among the tribes has now been traced, from its first or simple drawings in the inscription of totems and memorials on grave-posts, through the various methods adopted to convey information on sheets of bark, scarified trees, and other substances, and through the institutions and songs of the Medá, and the Wabeno societies, the mysteries of the Jeesukáwin, the business of hunting, and the incidents of war and affection. It remains only to consider their use in an historical point of view, or in recording, in a more permanent form than either of the preceding instances, such transactions in the affairs of a wandering forest life as appear to them to have demanded more labored attempts to preserve.

The term kekewin is applied to picture-writing generally. Another syllable, (no) is thrown into the centre of the word, when the figures are more particularly designed to convey instruction. The term then is kekenowin. It is the distinction which the native vocabulary appears to establish, between simple representative figures and symbols. By reference to a prior page, other terms, descriptive of other means of communicating information by signs, or emblems, will be observed. The term Muz-zin-a-bik-on, is strictly applied to inscriptions on rocks, or, as the word literally implies, Rock-writing. Izzi is one of those general stock roots in the language, denoting generic matter or substance, which enters into a variety of compound words and phrases. As the vowel, i, is permutable under the influence of the juxtaposition of various prefixed consonants, the sound changes frequently, to uzzi, ozzi, &c. The letter M, as an initial in compound words in this language, is generally derived from the adjective, Monaudud, (a bad thing, or substance,) and denotes a bad or defective quality. In this instance, its meaning and office is, evidently, to denote a mysterious import; most things of a mysterious nature being associated in the Indian mind with fear, or a bad quality. Aubik, the third syllable, is rock, and the termination in *on*, (pronounced oan,) is a common inanimate plural. Muzziniegun, a single letter, book, writing, or piece of written or printed paper, derives its first two syllables from the same roots, and has the same meaning. Its termination in egun, instead of aubick, is from *jeegun*, a generic word for implement, or anything artificially made. The word is frequently, most frequently, indeed, contracted to *gun*; and in this instance means paper—for which the natives had no word. The precise difference between the two terms, therefore, is, that between paper-writing and rock-writing.

Of rock-writing, or muzzinabikon, there are many examples in North America; but most of the known inscriptions consist of single, or at most, but few figures. Allusion

has been made to several instances of this kind, which are generally in the simple representative character. There has been noticed a striking disposition in the persons inscribing these figures, to place them in positions on the rock, not easily accessible, as on the perpendicular face of a cliff, to reach which, some artificial contrivance must have been necessary. The object clearly was, to produce a feeling of surprise or mystery. The mottled and shaded appearance on the imposing line of coast on Lake Superior, called the Pictured Rocks, is not at all the result of pictured writing. No artificial writing of any kind has been noticed there. The term has been introduced into popular use to denote a geological effect analogous to that for which, in mineralogy the Germans have the appropriate term of *ange laufenen farben*, or irridescent colours.[1]

There exists, however, an inscription at a point west of this precipitous portion of the coast, on the banks of the Namabin, or Carp River, about half a day's march from its mouth. The following copy of this inscription (Plate 57) was made by the chief Chingwauk, and drawn on birch bark. He also explained the symbols and gave its full interpretation. There lived on that stream, as he states, years ago, a chief of the name of Myeengun, or the Wolf of the Mermaid, (or rather, as the language has it, Merman totem,) who was skilled in the Meda, and was invested by the opinion of his people, with a character of much skill and secret power. He practised the arts and ceremonies of the Meda, and made *cheekwondum*. By these means he acquired influence, and raised a war party which crossed Lake Superior in canoes. The expedition was not barren in other respects of success, but this exploit was considered as a direct evidence of the influence of his gods, and it gave him so much credit, that he determined to perpetuate the memory of it, by a Muz-zin-a-bik-on. He made two inscriptions, one on the south, and the other on the north shores of the lake. Both were on the precipitous faces of rocks. Copies of both are presented. These copies were made with the point of a knife, on a roll of bark of firm texture, and exhibit an evidence of ingenuity and dexterity in the art, which is remarkable. They are transcribed in the two following pictographs, marked A and B., (Plate 57.)

Figure 1 (A) represents the chief Myeengun, whose family totem is given under the form of his lodge, (Number 2.) This lodge is to be regarded as ancestral. The totem Nebanabee, or the Merman, No. 3, fills it, and symbolically denotes that all its members bear the same mark. His individual name is given by Figure No. 4, the wolf. The whole of the remaining eight figures, are symbolical representations of the various spirits, or gods, upon whom he relied. Number 5 is the Misshibezhieu, or fabulous panther. The drawing shows a human head crowned with horns, the usual symbol of power, with the body and claws of a panther, and a mane. The name of

[1] This term denotes an effect merely, but conveys no idea of the cause or manner of producing the effect, which is so graphically denoted in the German.

A
B

the panther, Misshibezhieu, is a great lynx. The crosses upon the body denote night, and are supposed to indicate the time proper for the exercise of the powers it conveys. Number 6 is a representation of the same figure without a mane, and without crosses, and denotes the exercise of its powers by day-light. In Number 7 he depicts his reliance upon Mong, or the loon; in Number 8, upon Mukwah, or the black bear; and in Number 9, on Moaz, or the moose. Each of these objects is emblematic of some property, or qualification, desired by the warrior. The loon, whose cry foretells changes of the weather, denotes forecast; the bear, strength and sagacity; and the moose, wariness, being the most keen of hearing and wary of any of the quadrupeds. In Number 10, he depicts a kind of fabulous serpent resembling a saurian, having two feet, and armed with horns. Both these appendages are believed to be symbolic of its swiftness and power over life. It is called Misshikinabik, or Great Serpent. In Number 11 there is shown a reptile of analogous powers, but it has a body mounted on four legs, and is therefore more clearly of the lizard, or saurian type. The name is, however, the same.

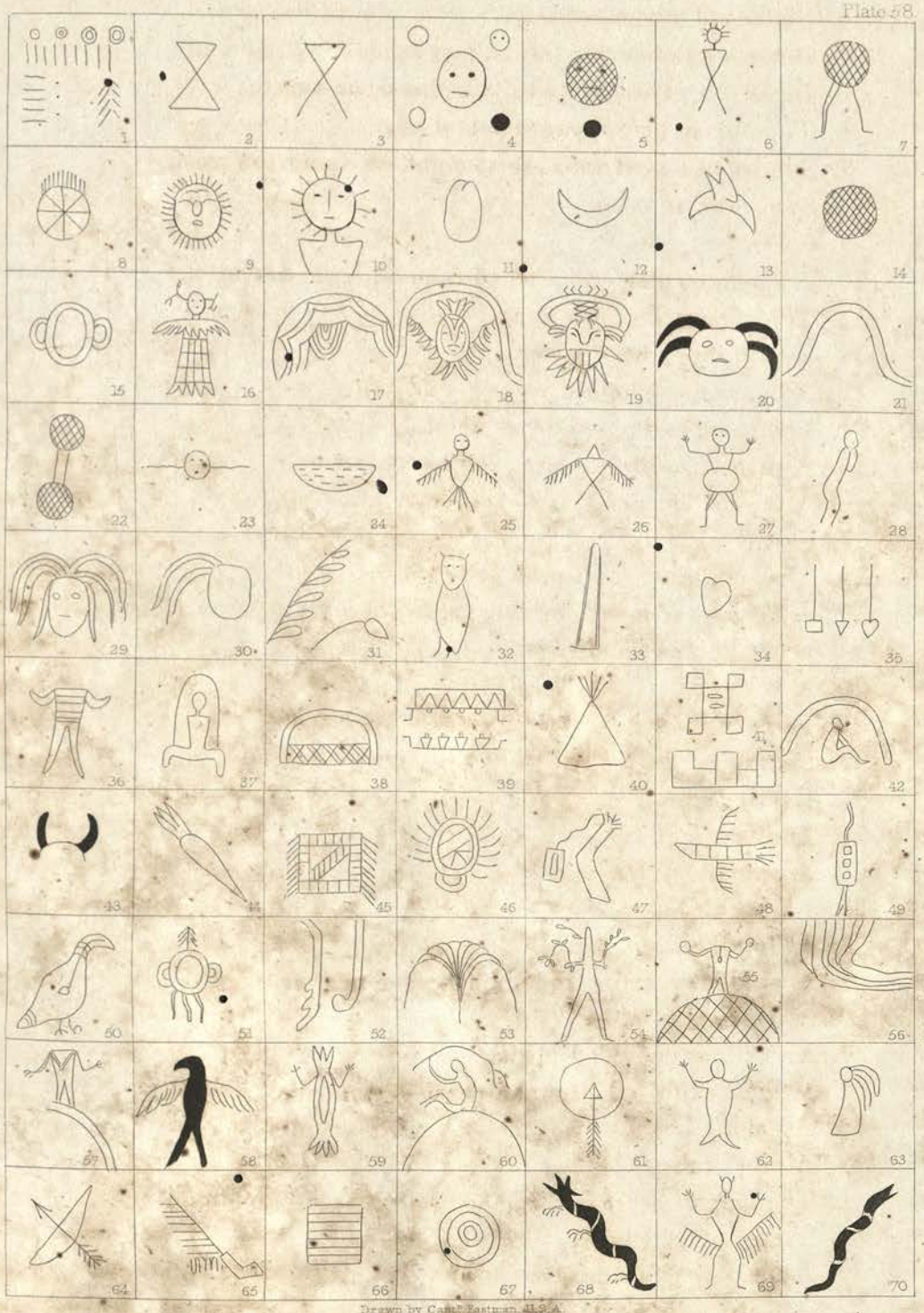
Thus far are detailed the means and powers upon which the chief relied, and these were (symbolically) inscribed in the region of his residence, on the southern shores of the lake. The results of the expedition are given in pictograph B, Plate 57, which was painted on the face of a rock at WAZHENAUBIKINIGUNING AUGAWONG, or the Place of the Writing, or Inscription Rock, on the north shores of Lake Superior, Canada. It is near a bay, between this point and Namabin River, that the lake was crossed. The passage was made in five canoes of various sizes, and numbering, in all, fifty-one men. Of these, sixteen were in number one, nine in number two, ten in number three, eight in number four, and eight in number five. The first canoe was led by Kishkemunasee, or the Kingfisher, (figure Number 6,) who was his chief auxiliary. The crossing occupied three days, depicted by the figure of three suns, under a sky and a rainbow, in Number 7. In Numbers 8, 9, and 10 he introduces three objects of reliance, not previously brought forward. Number 8 is the Mikenok, or land-tortoise, an important symbol, which appears to imply the chief point of triumph, that is, reaching land. Number 9 is the horse, and reveals the date of this adventure as being subsequent to the settlement of Canada. The Meda is depicted on his back, crowned with feathers, and holding up his drum-stick, such as is used in the mystic incantations. Number 10 is the Migazee, or eagle, the prime symbol of courage. In Number 11 he records the aid he received from the fabulous night panther — this panther, by the way, is generally located in the clouds — and in Number 12 a like service is recorded to the credit of the great serpent.

The following explanations of Plates 58 and 59, exhibit a general synopsis of the symbolic and representative devices in common use.

Number 1. Chronological and arithmetical devices.

" 2. Symbol of a headless body.

Number 3. Symbol of a headless body.
" 4. Devices representing the human head.
" 5. Death's head — symbolically eclipsed, or veiled.
" 6. The human figure — representative.
" 7. Symbol of a man walking at night, or under the moon.
" 8. Symbol of the sun.
" 9. Do. do.
" 10. A spirit, or man enlightened from on high, having the head of the sun.
" 11. Totemic mark of the sun.
" 12. The moon — dry quarter.
" 13. The moon — flaming.
" 14. The moon — eclipsed, or at night.
" 15. A man's head, with ears open to convictio..
" 16. A winged female.
" 17. Clouds.
" 18. The sun filling the world.
" 19. A Meda — endowed by the sun with mystic power, denoted by the appended plumes and rays.
" 20. A Wabeno.
" 21. The sky.
" 22. Death's heads.
" 23. Hearing ears.
" 24. The sea.
" 25. A spirit.
" 26. Do.
" 27. A Jossakeed.
" 28. A sick man under the influence of necromancy.
" 29. A Meda.
" 30. An evil, or one-sided Meda.
" 31. Medical skill — the human heart — symbolic.
" 32. An idol.
" 33. A seer's image.
" 34. The human heart — a symbol.
" 35. Symbols of the heart.
" 36. A headless Wabeno.
" 37. A man loaded with presents.
" 38. The society of the Wabeno — seated in a lodge.
" 39. Grand medicine.
" 40. Domestic circle.
" 41. A fortress — European.



Drawn by Capt. Eastman U.S.A.

SYNOPSIS OF INDIAN SYMBOLS

SYNOPSIS OF SIOUAN SYMBOLS

Number 42. A necromantic professor filling the world with his power and skill.
" 43. A symbol of power.
" 44. A Gushkepitugush, or magic medicine-sack.
" 45. A magic drum.
" 46. The sun inclined to hear.
" 47. A magic bone lifted by a meda.
" 48. A magic bone flying.
" 49. A wampum belt.
" 50. A cormorant under magic influence.
" 51. The sun — in a hearing attitude.
" 52. War-clubs.
" 53. The medical power of a plant filling the world, and reaching to the sky.
" 54. A medical professor — botanic.
" 55. A Wabeno — headless — standing on the world — holding human hearts
" 56. Flames — symbolic.
" 57. A Wabeno — having power to stand on half the world.
" 58. An American — symbolic.
" 59. A mösa — a species of worm, alluded to by the Wabenos.
" 60. A Wabeno, sitting on the top of "the circle of the heavens."
" 61. A magic ring and a dart — symbolic of magic skill.
" 62. A mer-man — a totem.
" 63. A female prophet.
" 64. A symbol of war.
" 65. A symbol of peace.
" 66. Goods — a symbol.
" 67. Symbol of time.
" 68. The great horned serpent.
" 69. A spirit of evil.
" 70. Serpent.
" 71. Sociality.
" 72. The kingfisher — a totem.
" 73. Spirit of evil, looking into heaven.
" 74. The tortoise — a totem.
" 75. A belt or baldric — nocturnal fraternity.
" 76. A meda — with great magic power.
" 77. A budding war-club.
" 78. A Jossakeed, sustained by the power of birds to look into events.
" 79. Fabulous serpent.
" 80. Stuffed bird — a magic symbol.

Number 81. A doctor, having great skill in plants. — The birds give him the power of ubiquity.
" 82. A magic grasp.
" 83. Hearing serpent.
" 84. A symbol of the power to look into futurity.
" 85. A man clothed in a bear's skin.
" 86. Symbol of power over the heart.
" 87. Symbol of spiritual power.
" 88. Representative figure of a female.
" 89. The catfish — a totem.
" 90. The eagle — a totem.
" 91. Disabled man.
" 92. Pipes.
" 93. A bad spirit of the air.
" 94. Spirit of the blue sky.
" 95. A woodpecker, flying off in a direct line.
" 96. A bad spirit of the sky.
" 97. Symbol of a Wabeno standing on the globe.—Totem of his name.
" 98. The sun.
" 99. A spirit of prophecy of the sky.
" 100. The serpent penetrating the earth.
" 101. Plants — symbols of medical power.
" 102. A beaver's tail.
" 103. Symbol of magical power.
" 104. A Meda's power, symbolized by an uplifted arm.
" 105. Symbol of a Meda's power, holding the clouds in his hands.
" 106. Botanical power.
" 107. The turtle.
" 108. Medical power — a symbol.
" 109. Do. do. do.
" 110. Monster — issuing from the earth.
" 111. Symbol of 40 heads killed in battle.
" 112. Flag at a grave.
" 113. A meda — with power.
" 114. Symbol of death.
" 115. A flag at a grave.
" 116. War lance-club.
" 117. Symbol of war.
" 118. A bale of goods.
" 119. A canoe — hunter's.

Number 120. A monster figure used in the game of the bowl.
" 121. A chief,
" 122. A bad spirit half fledged.
" 123. Symbol of mythical power.
" 124. A great war captain — with one hand he grasps the earth, with the other the sky.
" 125. Symbol of a warrior bold as the sun.
" 126. Reindeer's head — a totem.
" 127. A canoe filled with warriors.
" 128. Instruction in magic.
" 129. An encampment — symbolic.
" 130. A beaver under medical influence.
" 131. A wolf — a totem.
" 132. A fabulous bear — having a copper tail.
" 133. Symbol of speed.
" 134. A crane — a totem.
" 135. A deer — a totem.
" 136. A fabulous snake.
" 137. Satanic power — a symbol.
" 138. Crossed serpents — a symbol of wariness.
" 139. Symbol of the death of a man whose totem is the crane.
" 140. Symbol of death — of the bear totem.

These signs by no means fill the entire symbolic alphabet of the Kekenowin and Kekewin, but will serve to denote something of their capacity of symbolizing objects in the various departments of nature.

9. Universality and Antiquity of the Pictographic Method among the Northern Tribes.

Geographical Area covered by the Migrations of the Algonquin Tribes; — The great fixity of Mental and Physical Character, caused by their Religious Beliefs; — These Beliefs of a strongly marked Oriental Type; — Their Pictography to be traced back to the North Atlantic; — Their Ethnological Identity with the Ancient New England Tribes; — Examples of Indian Petitions to the President of the United States.

Pictorial inscriptions of the character of the Muzzinabiks of the Western Indians, particularly of those of the Algonquin type of languages, are to be traced eastward from Lake Superior and the sources of the Mississippi, on the back line of their migration, through Lake Huron, by its northern communications, to the shores of the Northern Atlantic. One of these has been previously alluded to as existing on the Straits of St. Mary's, and it is believed that the art will be found to have been in use,

and freely employed at all periods of their history, embracing the residence of their ancestors on the shores of the Atlantic. The ancient inscription existing at the mouth of the Assonet or Taunton River, between the States of Rhode Island and Massachusetts, is believed to be a record, essentially, of this symbolic character, inscribed around an old Scandinavian inscription.

It is found that very few essential changes in their forest arts or character have taken place among the North American tribes for several centuries. There is scarcely anything more worthy of remark than this general fixity of character, and indisposition to change, or adopt any new traits, or abandon any old ones. The state of a society, simple and erratic, and moulded together on the basis of petty predatory wars and hunting, did not demand extraordinary efforts. The arts that sufficed one generation sufficed the next. There was always a sanctity in their localities, and a strong appeal to prejudice in a reference to ancestral customs, and to places of actual residence and achievements. There was never a more powerful appeal to be made by their speakers than is contained in the epithets, the land of my fathers, and, the graves of my ancestors. The opinion that prior times had attained all that was worth attainment, one of the dogmas of Pontiac, has had the most paralyzing effect upon the progress of the hunter tribes. Elksquatowa, the Shawnee Prophet, had a powerful effect in confirming them in the miraculous power of his Jeesukáwins. It also had this further effect, that if they learnt nothing new they forgot nothing old. The old religion and old notions of barbarism had charms for them. How far into remote antiquity this remark should be carried may, perhaps, admit of question, but its truth is vindicated by the three centuries which have elapsed since the discovery; for, with the exception of mere changes of articles of dress and arms, and partial modes of subsistence, the wild-wood tribes of A. D. 1850 are, mentally, physically, and characteristically, identical with those of A. D. 1500.

One of the great causes of this fixity and identity — we may add, the great cause of both, is to be found in their system of religious belief and worship.

The religion and the mythology of the North American Indians, are the two prolific sources of their opinions. Their belief on these heads may be confidently asserted to have been the cause of action in many of the most important events which mark the history of the race, ancient and modern. And the topic is one which demands a careful investigation in the examination of questions of this nature. The idea and the picture representing the idea, are too intimately connected to allow the one to be well understood without a knowledge of the other. Great diversity has prevailed, as prior data demonstrate, in the number and character of the symbols which have served to conduct their worship; but there are certain leading principles to be traced through these diversities of types and signs. Wherever examined, whether in the ancient seats of their power in New England, or on the plains of the Mississippi, or the borders of the Lakes, their religion is found to be based on the

belief in the existence of a Great Spirit, or universal Power, who is regarded as the Wazhetoad, or if the object made be animate, Wazheaud, or maker. Practically, and as denoted by the animate roots of active verbs implying life, or being, he is recognized as the Original Animating Principle. As such, he is believed to be invariably Good, and inseparable from the Principle of Good. But, evidently to account for evil influences in the world, the Indian theology provides an antagonistical power which is represented as the impersonation of the Principle of Evil. Both these powers are called Monedo, and admit the prefix Great, but the latter is never denominated Wazheaud or Maker. This is a very ancient oriental belief, as ancient, certainly, as the age of Zoroaster, by whom it appears to have been originally constructed to account for all conflicting moral phenomena in the government of the world. Our tribes are certainly innocent of any refined theory or reflection of this kind; but they adhere, with rigid pertinacity, to the doctrine of the two antagonistical powers of Good and Evil. And this tells the history of their origin and descent, with more plainness than their mounds, their anomalous style of architecture, or their unread signs and hieroglyphics. These two principles are, however, found to be so attenuated and infinitely diffused, and in this diffusion they have become so materialized and localized, and so prone to manifest themselves in the shape of created matter, animate, and inanimate, that every class of creation, and every species of every class, is seized upon by their forest worshippers, as an individual god. The whole earth is thus peopled with imaginary deities of benign or malignant power. The two classes are perpetually antagonistical to each other, and their votaries are thus kept in a perpetual state of fear and distrust.

No example of the Indian picture-writing has been consulted, in which this system of belief is not strongly brought out. Whoever has attentively examined the preceding pages must have been impressed with the multiplicity of these minor deities, and with the complex character of the Indian polytheism. Upon a system of spirit-worship thus diffuse, is engrafted the idea of medical magic, called Meda, and the oriental notion of Oracles, or Prophets, called Jossakeeds. These constitute the elements in their belief. The preceding details demonstrate that there is no department of Indian life which they do not invade with an absorbing interest. They are the leading influences in war and hunting. They have converted the medical art, in a great degree, into necromantic rites. They furnish objects of remembrance upon graves, they animate the arcana of the mystical societies, and they constitute no small part of the pictorial matter recorded on trees, on rolls of bark and skins, and even on the hard surface of rocks. Whenever a sheet of Indian figures, or a piece of their symbolic writings, is presented for examination, it is important to decide, as a primary point, upon its theological or mythological characteristics; for these are generally the key to its interpretation. It affords another coincidence to that above named, between the religious belief of the early nations of the eastern and the

western hemisphere, that the Creator, the Great Spirit, and the Wazheaud, was symbolized under the figure of the sun. Life, and the power of Evil, are personified, generally, under the form of a serpent; and this accounts, not only for the great respect and reverence they have for serpents, but for the pervading influence the symbol has in their meda ceremonies, and in their traditions.

It is historically known that these religious institutions existed among the tribes who formerly occupied New England, the same in principle as they are now found at the West. The powwow, and the sagamore of the waters of Long Island, Narragansett, and Massachusetts, exercised the same office, and were governed by the same principles, as the meda and the wabeno of the Illinois and the Mississippi, and the jossakeed and juggler of the banks of the Huron and the Lake of the Woods. This was in the general direction that the migration of the race from the North Atlantic ran, and there was and still exists a more intimate affiliation in rites and customs, as well as in language, between these extremes, than between them and the trans-Mississippian tribes.

It has been shown that the office of a meda, or a prophet, is not only sometimes united in that of a war-chief, or captain, but it is often the best and surest avenue to popularity. When success had crowned the efforts of the Chippewa chief Myeengun, he inscribed its results by figurative signs on the faces of two separate and distinct rocks. The Delaware war-chief, Wingenund, described the part he bore in the great Indian partisan war of the West, in 1762, by symbolic figures on the banks of the Muskingum. The Algonquin tribes who joined the French in the expulsion of the Sacs and Foxes from the eastern part of Winconsin, in 1754, made a similar record of their success on the cliffs of Green Bay. There are still existing symbolical figures, preserved by the exuded gum on the sides of trees of the species *pinus resinosa*, on the portage west from Leech Lake to the shores of Pike's Bay on Cass Lake, which were made, the chiefs informed me, by the Indians who inhabited the country at the head of the Mississippi, before its conquest by the Pillagers. And if so, they are equally remarkable for the duration of their drawings with those of the pines, mentioned by La Croix, as existing on the banks of the River Irtish, in Tartary.[1] The art of inscription by pictures, and the disposition to employ it, existed early and generally among all our principal tribes; but they contented themselves, in ordinary cases, by committing their records to sheets of bark, painted skins, tabular sticks of wood, or the decorticated sides of trees, where they were read by one or two generations, and then perished.

As a suitable conclusion to this chapter, an example of a pictographic petition to the President of the United States, will be given. In the month of January, 1849, a delegation of eleven Chippewas, from Lake Superior, presented themselves at Washington, who, amid other matters not well digested in their minds, asked the govern-

[1] Vide Strahlenberg, seq.

ment for a retrocession of some portion of the lands which the nation had formerly ceded to the United States, at a treaty concluded at Lapointe, in Lake Superior, in 1842. They were headed by Oshcabawiss, a chief from a part of the forest-country, called by them Monomonecau, on the head-waters of the River Wisconsin. Some minor chiefs accompanied them, together with a Sioux and two boisbrules, or half-breeds, from the Sault Ste. Marie, Michigan. The principal of the latter was a person called Martell, who appeared to be the master-spirit and prime mover of the visit, and of the motions of the entire party. His motives in originating and conducting the party, were questioned in letters and verbal representations from persons on the frontiers. He was freely pronounced an adventurer, and a person who had other objects to fulfil, of higher interest to himself than the advancement of the civilization and industry of the Indians. Yet these were the ostensible objects put forward, though it was known that he had exhibited the Indians in various parts of the Union for gain, and had set out with the purpose of carrying them, for the same object, to England. However this may be, much interest in, and sympathy for them, was excited. Officially, indeed, their object was blocked up. The party were not accredited by their local agent. They brought no letter from the acting Superintendent of Indian Affairs on that frontier. The journey had not been authorized in any manner by the department. It was, in fine, wholly voluntary, and the expenses of it had been defrayed, as already indicated, chiefly from contributions made by citizens on the way, and from the avails of their exhibitions in the towns through which they passed; in which, arrayed in their national costume, they exhibited their peculiar dances, and native implements of war and music. What was wanting, in addition to these sources, had been supplied by borrowing from individuals.

Martell, who acted as their conductor and interpreter, brought private letters from several persons to members of Congress and others, which procured respect. After a visit, protracted through seven or eight weeks, an act was passed by Congress to defray the expenses of the party, including the repayment of the sums borrowed of citizens, and sufficient to carry them back, with every requisite comfort, to their homes in the north-west. While in Washington, the presence of the party at private houses, at levees, and places of public resort, and at the halls of Congress, attracted much interest; and this was not a little heightened by their aptness in the native ceremonies, dancing, and their orderly conduct and easy manners, united to the attraction of their neat and well-preserved costume, which helped forward the object of their mission.

The visit, although it has been stated, from respectable sources, to have had its origin wholly in private motives, in the carrying out of which the natives were made to play the part of mere subordinates, was concluded in a manner which reflects the highest credit on the liberal feelings and sentiments of Congress. The plan of a retrocession of territory, on which some of the natives expressed a wish to settle and

adopt the modes of civilized life, appeared to want the sanction of the several states in which the lands asked for lie. No action upon it could therefore be well had, until the legislatures of these states could be consulted.

But if there were doubts as to the authority or approval of the visit on the part of either the Chippewas or frontier officers of the government, these very doubts led the party, under the promptings of their leader, to resort to the native pictorial art, which furnishes the subject of this notice. Picture-writing, in some of its shades, has long been noticed as existing among the western Indians. By it not only exploits in war and hunting are known to be recorded, but such devices are not unfrequently seen drawn on the smooth and often inaccessible faces of rocks, on which they are frequently observed to be painted, and sometimes fretted in. A still more common exhibition of the mode is observed in the Indian adjedatig, or grave-post; and it constitutes a species of notation for their meda and hunting songs.

In the instance now before us, it is resorted to, to give authority to delegates visiting the seat of government.' These primitive letters of credence were designed to supply an obvious want on the presentation of the delegation at Washington. Their leader was too shrewd not to know that letters of this kind would be required in order to enable him to stand, with authority, before the chief of the Indian Bureau, the Secretary of War, and the President.

The following are exact transcripts of the rolls on a reduced scale. There are five separate sheets, four of which are illustrative of the principal one, which expresses in symbols the object of the memorial. The material is the smooth inner coats of the bark of the betula papyracea, or white birch of northern latitudes. To facilitate description, each of the pictographs, or traced-sheets, and each of the figures of the several inscriptions, has been numbered. The names of the persons whose totemic bearings are alone introduced into these transcripts, have been written down from the lips of the interpreter. In this way, and from a comparison of the scrolls with other data possessed on the same branch, the whole story has been secured. The chiefs *and* warriors of the five several villages who united in the objects of the visit—*for* there were some temporary and other objects, besides the one above named, which are not necessary to be mentioned, were represented alone by the symbols, or figures of animals which typify their clans, or totems. Their names were written down from the lips of their interpreter.

It will be seen, that by far the greatest number of the totems or clans here named, are represented by well-known species of quadrupeds, birds, or fishes, of the latitudes in which the Chippewas now live. The totemic devices would, therefore, appear to be indigenous and local, and to have little claim to antiquity. A few of them are mythological, which will be pointed out as we proceed.

The description of Pictograph A, Plate 60, is as follows:—

'This is the leading inscription, and symbolizes the petition to the President. No. 1.

PICTOGRAPH B.

Drawn by Capt. S. Eastman, U.S.A.

KENISTENO AND HIS BAND, OF TROUT LAKE, WISCONSIN.

PUBLISHED BY LIPPINCOTT, GRAMBO & CO. PHILADA.

It commences with the totem of the chief, called Oshcabawis, who headed the party, who is seen to be of the *Ad-ji-jauk*, or Crane clan. To the eye of the bird standing for this chief, the eyes of each of the other totemic animals are directed as denoted by lines, to symbolize *union of views*. The heart of each animal is also connected by lines with the heart of the Crane chief, to denote *unity of feeling and purpose*. If these symbols are successful, they denote that the whole forty-four persons both *see* and *feel* alike—THAT THEY ARE ONE.

No. 2, is a warrior, called Wai-mit-tig-oazh, of the totem of the Marten. The name signifies literally, He of the Wooden Vessel, which is the common designation of a Frenchman, and is supposed to have reference to the first appearance of a ship in the waters of the St. Lawrence.

No. 3. O-ge-ma-gee-zhig, is also a warrior of the Marten clan. The name means literally, Sky-Chief.

No. 4, represents a third warrior of the Marten clan. The name of Muk-o-mis-uds-ains, is a species of small land tortoise.

No. 5. O-mush-kose, or the Little Elk, of the Bear totem.

No. 6. *Penai-see*, or the Little Bird of the totem of the *Ne-ban-a-baig*, or Man-fish. This clan represents a myth of the Chippewas, who believe in the existence of a class of animals in the Upper Lakes, called Ne-ban-a-baig, partaking of the double natures of a man and a fish—a notion which, except as to the sex, has its analogies in the superstitions of the nations of western Europe, respecting a mermaid.

No. 7. *Na-wa-je-wun*, or the Strong Stream, is a warrior of the O-was-se-wug, or Catfish totem.

Beside the union of eye to eye, and heart to heart, above depicted, Osh-ca-ba-wis, as represented by his totem of the Crane, has a line drawn from his eye forward, to denote the course of his journey, and another line drawn backward to the series of small rice lakes, No. 8, the grant of which constitutes the object of the journey. The long parallel lines, No. 10, represent Lake Superior, and the small parallel lines, No. 9, a path leading from some central point on its southern shores to the villages and interior lakes, No. 8, at which place the Indians propose, if this plan be sanctioned, to commence cultivation and the arts of civilized life. The entire object is thus symbolized in a manner which is very clear to the tribes, and to all who have studied the simple elements of this mode of communicating ideas.

The four accompanying pictographs are adjuncts of the principal inscription, and the object prayed for, and are designed to strengthen and enforce it, by displaying in detail the villages and persons who concur in the measure.

Pictograph B, Plate 61, is interpreted thus:—This is a symbolic representation of the concurrence of certain of the Chippewas of Trout Lake, on the sources of Chippewa River, Wisconsin, in the object.

Number 1 represents the Chief Kenisteno, or the Cree, of the totem of the brant. O-tuk-um-i-pe-nai-see (Number 2) is his son.

Pa-na-shee (Number 3) is a warrior of the totem or clan of the Long-tailed Bear. This is a mythological creation of the Chippewas, by whom it is believed that such an animal has a subterranean existence; that he is sometimes seen above ground; and that his tail, the peculiar feature in which he differs from the northern black bear, is formed of copper, or some bright metal.

Number 4. This is a warrior of the Catfish totem, of the particular species denoted Ma-no-maig. The name is Wa-gi-má-we-gwun, meaning, He of the chief-feather.

Number 5. Ok-wa-gon, or the neck, a warrior of the Sturgeon totem.

Number 6. O-je-tshaug, a warrior of the totem of the species of spring duck called Ah-ah-wai by the natives, which is believed to be identical with the garrulous coast duck called Oldwives by sailors.[1]

Numbers 7, 8, 9. Warriors of the clan of the fabulous Long-tailed Bear, who are named, in their order, Wa-gi-ma-wash, or would-be-chief, Ka-be-tau-wash, or Mover-in-a-circle, and Sha-tai-mo, or Pelican's excrement.

Number 10. Ka-we-tau-be-tung, of the totem of the Awasees, or Catfish.

Number 11. O-ta-gau-me, or the Fox Indian, of the Bear totem; and Ah-ah-wai, or the first spring duck of the Loon totem,—all warriors.

Pictograph C, Plate 62. By this scroll the chief Kun-de-kund of the Eagle totem of the river Ontonagon, of Lake Superior, and certain individuals of his band, are represented as uniting in the object of the visit of Oshcabawis. He is depicted by the figure of an eagle, Number 1. The two small lines ascending from the head of the bird denote authority or power generally. The human arm extended from the breast of the bird, with the open hand, are symbolic of friendship. By the light lines connecting the eye of each person with the chief, and that of the chief with the President, (Number 8,) unity of views or purpose, the same as in pictograph Number 1, is symbolized.

Numbers 2, 3, 4, and 5, are warriors of his own totem and kindred. Their names, in their order, are On-gwai-sug, Was-sa-ge-zhig, or The Sky that lightens, Kwe-we-ziash-ish, or the Bad-boy, and Gitch-ee-ma-tau-gum-ee, or the great sounding water.

Number 6. Na-boab-ains, or Little Soup, is a warrior of his band of the Catfish totem.

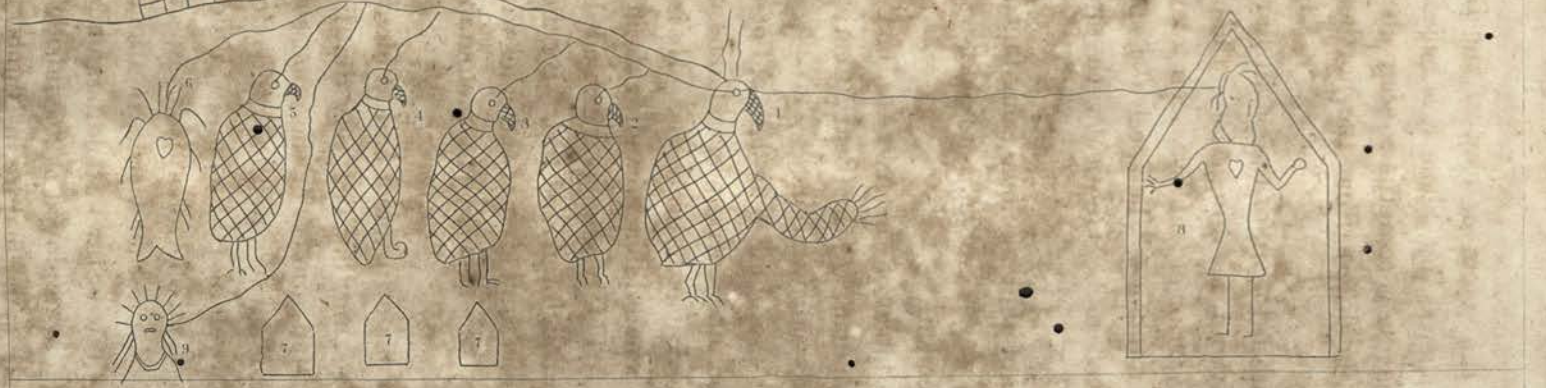
Figure Number 7, repeated, represents dwelling-houses, and this device is employed to denote that the persons, beneath whose symbolic totem it is respectively drawn, are inclined to *live in houses and become civilized*, in other words, to abandon the chase.

Number 8 depicts the President of the United States standing in his official residence at Washington. The open hand extended is employed as a symbol of friendship, corresponding exactly, in this respect, with the same feature in Number 1.

[1] It is believed to be doubtful whether the Ah-ah-wai should not be classified with the totem of the Loon.

PICTOGRAPH C.

OKUNDEKUND, and his Band of Ontonagon Michigan.



PICTOGRAPH D.

Drawn by Capt. S. Eastman U.S.A.

KAKAKE-OCWINAOSH, and his Band of the head of Wisconsin River

The chief whose name is withheld at the left hand of the inferior figures of the scroll, is represented, by the rays on his head, (Figure 9,) as, apparently, possessing a higher power than Number 1, but is still concurring, by the eye-line, with Kundekund in the purport of pictograph Number 1.

Pictograph D, Plate 62. In this scroll figure Number 1 represents the chief Ka-kaik-o-gwun-na-osh, or a pigeon-haw-in-flight, of the river Wisconsin, of the totem of the Long-tailed Bear. The other figures of the scroll stand for nine of his followers, who are each represented by his appropriate totem. Number 2 is the symbol of Na-wa-kum-ig, or He-that-can-mystically-pass-down-in-the-earth. Number 6, Men-on-ik-wud-oans, Number 7, Sha-won-e-pe-nai-see, the southern bird, and Number 8, Mich-e-mok-in-ug-o, Going tortoise, are all warriors of the totem of the mystical Long-tailed Bear. Number 3 and 9 denote Chi-a-ge-bo and Ka-gá-ge-sheeb, a cormorant, two warriors of the bear totem.

No. 4, Muk-kud-dai-o-kun-zhe, or black hoof, is a warrior of the brant clan.

No. 5, Mikinok, a turtle, and No. 10, Na-tou-we-ge-zhig, the Ear of Day, are warriors of the marten clan.

Pictograph E, Plate 63. By this scroll, nine persons of the village of Lac Vieu Desert, at the source of the River Wisconsin, including its chief, are represented as concurring in the petition, as depicted in scroll A.

No. 1 is the device of the chief Kai-zhe-osh, of the eagle totem.

No. 2, Ush-kwai-gon, instrument or drawer of blood, and No. 3, Mush-koas-o-no, Elk's tail, are represented as belonging to the same totem with himself. No. 4, Pe-kin-a-ga, the winner, is of the ah-ah-wa totem. Of the other persons of this village, who have yielded their assent, No. 5, Ka-ga-no-ga-da, No. 8, Wa-gi-win-a, and No. 9, Pe-midj-wa-gau-kwut, the hoe, (literally, cross-axe,) are of the bear totem. No. 6, Na-bun-e-gee-zhig, bright sky, is of the awassees or fish totem. No. 7, O-zhin-in-nie, the well-made man, is of the elk totem — a much-respected totem in that section of country. It is drawn with high horns, and a tuft from the breast, two very characteristic features of this animal, but, as is usual in the native devices, very much out of drawing. It has an eye-line, thrown widely forward, to denote its fixity on the seat of central power at Washington.

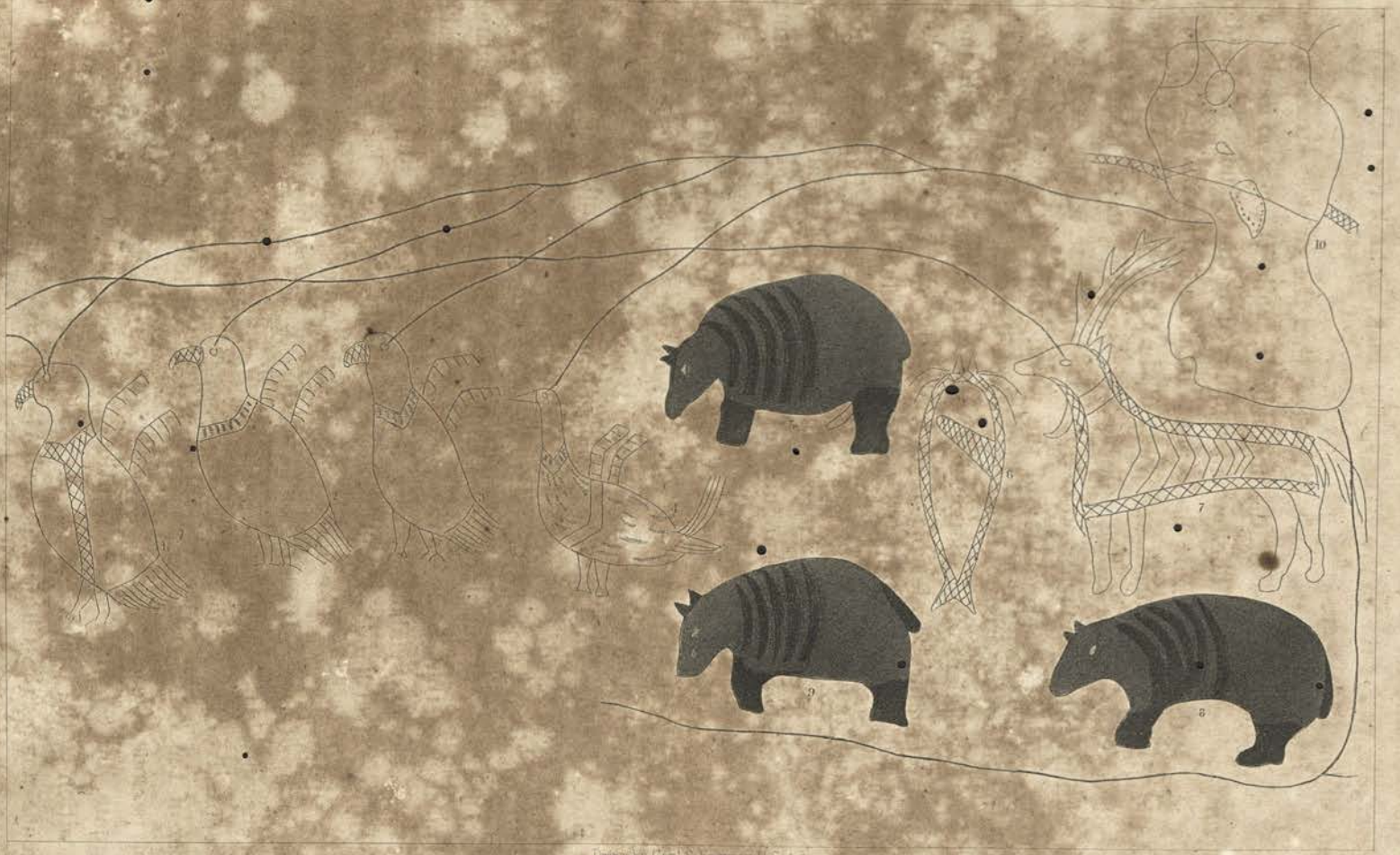
It will be perceived that the several members of the eagle totem, 1, 2, 3, and also the duck totem, No. 4, are denoted by the eye-lines as hailing from, or having their residences at, Lac Vieu Desert, No. 10, while the persons of the bear, elk, and cat-fish totems respectively have no such local sign. It is to be inferred, therefore, that these individuals live at other and distinct points, in that part of the country, but are not of the Lake of Vieu Desert.

The whole number of totems in the Chippewa nation is undetermined. Twelve are indicated in these devices. Of the forty-four persons who are represented, one is of the crane, four of the marten, seven of the black bear, one of the nebanabe, or man.

fish, six of the cat-fish, three of the brant, eight of the long-tailed subterranean bear, one of the sturgeon, two of the ahahway, or spring duck, eight of the eagle, two of the loon, and one of the elk totem.

It will be seen, in a view of the several devices, that the greatest stress appears to be laid throughout upon the *totem* of the individuals, while there is no device or sign to denote their *personal names*. The totem is employed as the evidence of the identity of the family and of the clan. This disclosure is in accordance with all that has been observed of the history, organization, and polity of the Chippewa, and of the Algonquin tribes generally. The totem is in fact a device, corresponding to the heraldic bearings of civilized nations, which each person is authorized to bear, as the evidence of his family identity. The very etymology of the word, which is a derivative from Do daim, a town or village, or original family residence, denotes this. It is remarkable, also, that while the Indians of this large group of North America, withhold their true personal names, on inquiry, preferring to be called by various sobriquets, which are often the familiar lodge-terms of infancy, and never introduce them into their drawings and picture-writing, they are prompt to give their totems to all inquirers, and never seem to be at a moment's loss in remembering them. It is equally noticeable, that they trace blood-kindred and consanguinities to the remotest ties; often using the nearer for the remoter affinities, as brother and sister for brother-in-law and sister-in-law, &c.; and that where there is a lapse of memory or tradition, the totem is confidently appealed to, as the test of blood affinity, however remote. It is a consequence of the importance attached to this ancient family tie, that no person is permitted to change or alter his totem, and that such change is absolutely unknown among them.

These scrolls were handed in, and deposited among the statistical and historical archives and collections of the bureau. By closely inspecting them, they are seen to denote the concurrence of but thirty-three Chippewa warriors, out of the entire Chippewa nation, besides the eleven persons present. Each family and its location, is accurately depicted by symbols. Unity is shown by eye-lines, and by heart-lines. Friendship by an open hand. Civilization by a dwelling-house. Each person bears his peculiar totemic mark. The devices are drawn, or cut, on the smooth inner surface of the sheets of bark. It will thus have been observed, that the Indian pictorial system is susceptible of considerable certainty of information. By a mixture of the pure representative and symbolical mode, these scrolls are made to denote accurately the number of the villages uniting in the object of Martell's party, together with the number of persons of each totemic class, who gave in their assent to the plan. They also designate, by geographical delineations, the position of each village, and the general position of the country which they ask to be retroceded. It is this trait of the existence among the Chippewas and Algonquins generally, of a pictorial art, or rude method of bark, tree, or rock-writing, which commends the circumstances of the visit to a degree of notice beyond any that it might, perhaps, otherwise merit. It



Drawn by Capt. S. Eastman U.S.A.

KAIZHEOSH, and his band from Lake View Desert, Michigan and Wisconsin.

Drawn by S Bauman U.S.A.

ATOTARHO THE FIRST IROQUOIS RULER

recalls strongly to mind the early attainments of eastern nations in a similar rude mode of expressing ideas by symbolic marks and symbols, prior to the remote eras of the introduction of the cuneiform, and long prior to the true hieroglyphic system of the Euphrates and the Nile. In fact, every trait of this kind may be considered as furnishing additional lights to aid us in considering the question of the origin, condition, capacities and character of hunter nations, of whose ancient history we are still quite in the dark.

10. Comparative Views of the Pictography of Barbarous Nations.

Foreign Pictographic Signs; — The Chinese Characters founded on the Picture-writing Devices of the Samoides — Siberians — Tartars; — Inscriptions from the Banks of the Yenisei and the Irtish; — Rock Inscriptions from Northern Asia; — System of the Laplanders; — Copies of the Figures printed on the Drums of the Lapland Magicians, with their Interpretation; — The Device on the great Drum of Torna; — Iroquois Pictography; — Specimen from Oceanica.

In comparing the system of simple pictorial notation, of which the outlines have now been presented, with similar efforts to record ideas in other parts of the world, there is, doubtless, a class of testimony referred to, from which important deductions may be drawn. The art, as we hinted in first sitting down to this paper, was one of the earliest known to mankind; and without supposing that in the progress of human diffusion over the globe, it was in all cases derivative, it was indubitably so in many instances. In others, it would have been originated or fallen into by the mere similarity of early circumstances and opinions, among erratic or migrating tribes. It was the first effort of men to transmit thought. Fear is perhaps the primary passion among rude nations. The Mysterious Power which governs the universe, as manifested in the phenomena of the heavens, has led all nations, however obscure, to adopt some sort of worship, and this was ever a prominent and leading motive. Whatever other passion or sentiment conspired to the institution of early religious rites, fear was most clearly the predominating cause. Wonder and superstition were at hand. The early history of men shows, that the first propitiatory offerings were made on this basis. What nations dreaded they worshipped, and the first step was to draw a picture of the object, or to symbolize the idea of it under the representation of some material form. In this manner the sun and the moon became at so early an epoch objects of almost universal adoration throughout the oriental world. The honors they received as symbols of a Higher Principle, they did not, however, permanently retain. They, in their turn, were symbolized by celebrated men; and thus Persia and Egypt, Hindostan and China, and other quarters of the eastern hemisphere, were filled with

their ruling deities, under the human form, and their kings and rulers traced their descent or relationship to these two luminaries.

In every case these nations mistook a picture for a god. We regard this as the element, or unit in pictorial writing. If they feared the Power which appeared to govern the elements, they also feared those more prominent and gigantic forms of the animate creation, which filled the earth, the air, or the seas. When they captured one of these prime animals, reptiles, or birds, they perpetuated the triumph by a figure, or picture of it. There was at once an ideographic record, but it was exclusively a record of substantives. Action was communicated to it by auxiliary figures of men and implements, trees and plains. For time, a dot would answer, and for arithmetic, a stroke. Such, we imagine, to have been the inception of the system. That it was susceptible of rapid improvement, and came to express a considerable sum of information, we have only to glance back at the preceding details to show. How soon the pictorial method ran into the true hieroglyphic, and the latter into the alphabetic, it would be very curious and instructive to inquire; but it is an inquiry which we must forego. For had we the requisite materials, it would demand all the space we propose to allot to the present outlines.

By the notices taken of the Egyptian system of hieroglyphic writing, an important link in their notorial chain of progress is shown. The thought occurred to the skilful hierophant, that a picture might stand for an articulate sound of the human voice. And the system adopted was, that the picture of the bird, animal or other object, so drawn to denote a sound, should represent, exclusively, the first or initial letter of the name of the object depicted. The discovery of this principle was the great revelation of modern times in Egyptian hieroglyphics, and has opened a large amount of information on the later monuments.

The Chinese system of writing is also based on, and has grown out of, the pictorial and the hieroglyphic. But it has assumed the most cumbrous and complex possible form for the communication of ideas; and one that is least favorable to the progress of the human mind. It constitutes the great objection to the phonetic system — *that* objection which introduces into it all its uncertainty, and continues to make it a subject of labor and disagreement among the learned — that there is a great multiplicity of its homophonous characters. The Chinese ran into a very unique system of recording thought, one which ensured great precision and certainty, but imposed on the learner a most extraordinary labor. It was to invent symbols for the sounds of whole words, terms and even phrases, instead of elementary sounds. Every noun-symbol, and every verb-symbol, and every pronoun-symbol was provided with adjunct characters, to denote accessary meanings, so that the Chinese alphabet is an alphabet of whole words, and not, as with us, and all other modern nations, an alphabet of elementary sounds.—Eighty thousand characters to record a language, instead of twenty-six. That a nation with such a system should not progress in knowledge, and

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TRIUMPHAL TABLET OF BELISTUN PERSIA

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that the pursuit of it should be highly valued, excites no wonder. What few have the time or means to obtain, must always excite that kind of respect which attaches to achievement.

These are the two only systems of hieroglyphics among mankind which have, either as hieroglyphics proper, or as altered arbitrary signs, run into, or effected the purpose of letters. And this result has been attained independently, and without the one having borrowed, or had, so far as history extends, the least probable or possible connection with the others.

In directing attention to the nations of other parts of Asia, or of the globe, who have attracted notice for their picture-writing, the field of observation of the American continent itself is narrowed, it is believed, rather from the amount of materials we can command, or the space which travellers have devoted to it, than from the absolute non-existence of such materials. It was long thought that much of the writings of the engraved rocks of Wady Mohattah, in the group of Mount Sinai, of which specimens were furnished by Burckhardt and La Borde, were either picture-writing, or hieroglyphics, as no ancient alphabets could be found to solve them. The figures of camels, men, and other representative objects, were, at least, presumptive proofs of a mixed system. It is now announced, however, that modern research has overcome the obstacles to their interpretation, and that the alphabet of the larger inscriptions has been made out, although we have not yet, on this side of the water, been favored with the results. The pictorial objects still remain. The fact of the existence of these inscribed rocks had been known since 1722. By some the inscriptions have been supposed to be of the date of the 6th century, and to be the work of pilgrims visiting Mount Sinai; others have seen reason to assign a later date. It appears important to preserve a distinction between the mere pictorial and the alphabetic part of the various inscriptions, which are found to spread over separate faces of the rocks for many leagues. The former may often be regarded as illustrative of the latter; but it is by no means certain that they are, in all cases, parts of the same inscription, or are even of the same age. Writers have generally regarded the pictorial signs as of the earliest date; and the occurrence of such inscriptions in this portion of Asia is in coincidence with the supposed early prevalence of the practice in that primitive region of the human race. If Egypt and China did not profit by the advance of each other, in the first culmination of the pictorial in their respective systems of hieroglyhic signs, they may, reasonably enough, be thought to have derived their earlier ideas of it from that central quarter.

The ancient cuneiform or arrow-headed character of Persia has been long regarded as among the hieroglyphic enigmas of this part of the eastern hemisphere; but this has also yielded to modern research, and been found to reveal the true elements of a written character. It is among the tribes of the vast area which was covered by the

Mongol, Tartar race, and by the Samoides of northern Asia, that we find the strongest remains of picture-writing.

The following transcripts are copied from the pages of the Swedish traveller, Strahlenberg, who first visited those countries about 1709, and published an account of his observations in the Low Countries, in 1722.[1] The first drawing is from the banks of the river Yenisei. Vide Figure C, Plate 64.

No explanation of it is attempted. The mere inspection of it denotes it to be one of those records of success in the chase, the communication of which, by pictures, is a common trait of roving and hunting bands. It takes its characteristic features from the natural history of the region; and we may suppose it to embrace rude representations of the Siberian hare, the cabarda or musk deer, and other known quadrupeds. Some of the under figures are manifestly symbolic, and five of them, inscribed above the figure of a heart, and bales of goods or baggage, are probably alphabetic.

The next specimen is from a precipitous rock on the river Irtish, a branch of the Nytza, Tartary. This rock, which is 36 feet high, has an isolated position. It has four sides, one of which faces the water, and has a number of tombs or sepulchral caves beneath. The figures which are here concentrated on a single folio cover, the four sides. They are drawn in red colors in a durable kind of pigment, which is found to be almost indestructible, and is much used for rock inscriptions. (See Figures 1, 2, 3, 4, Plate 65.)

In this inscription, we may suppose, there are some memorials of the persons entombed. They evince a curious mixture of the pictorial and hieroglyphic, and may at least be regarded as exhibiting the former in a state of transition. An opinion is expressed, which appears to be well founded, that they denote one of the earlier stages of the Chinese, which had been diffused into Tartary in the course of the wars and conquests carried on by these nations. Other specimens of such inscriptions are given from the vicinity of Tobolsk, which exhibit still more unequivocal proofs of the transmutation of the character, and, indeed, leave but little trace of its origin in the pictorial method.

In the annexed rock inscriptions, Figure 4, Plate 66, which complete my quotations from this work, there are two striking coincidences with the North American pictures, in the style of drawing, and the symbolic combinations of thought. The first is the human figure. In this example we behold that combination of a bird and a man which, in so many of the preceding mnemonic figures of war and hunting, are designed to represent speed, and the power of superior knowledge by exaltation to the regions of the air.

In the line of fourteen crosses we recognise the North American symbol for men.

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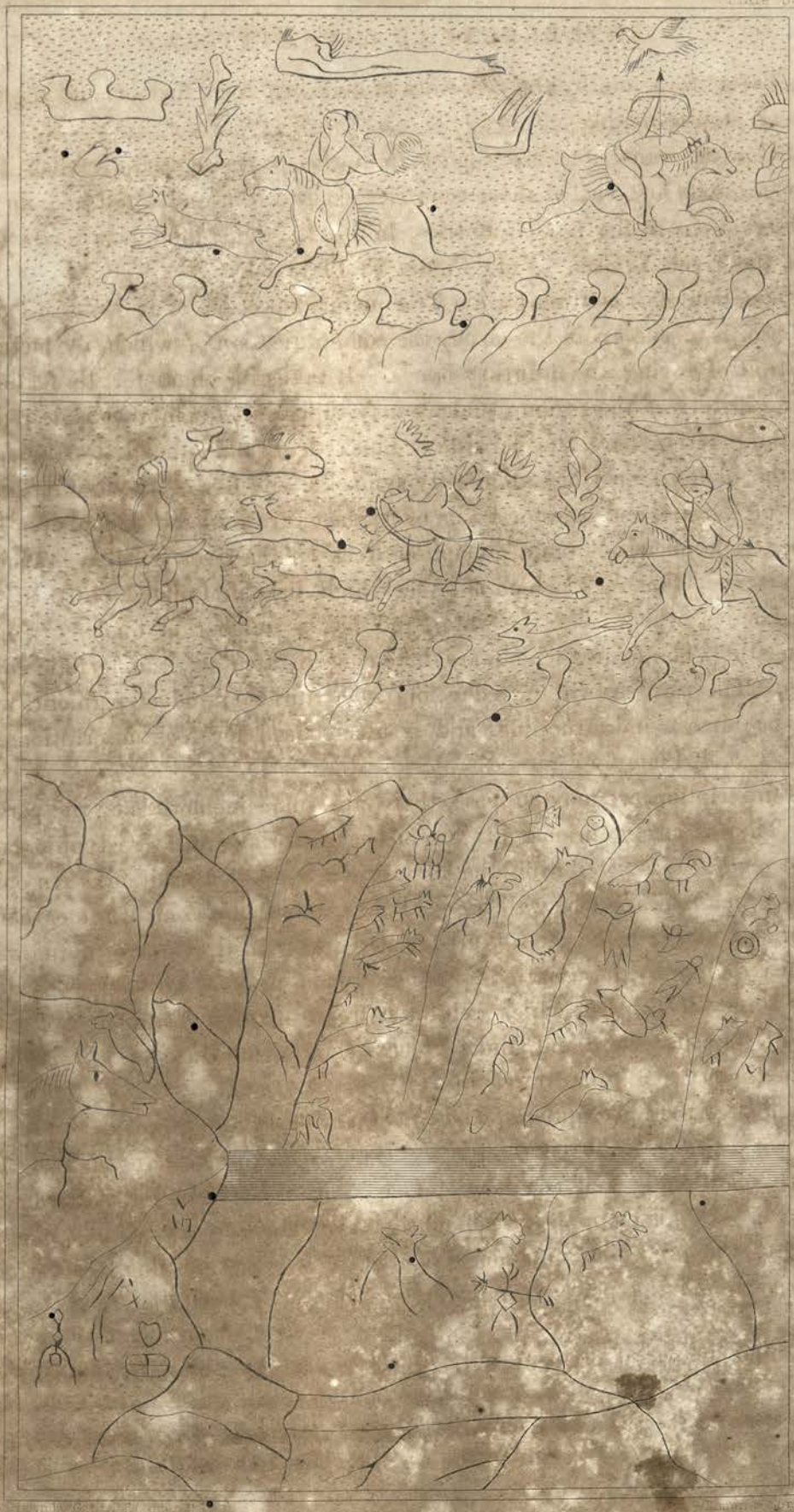
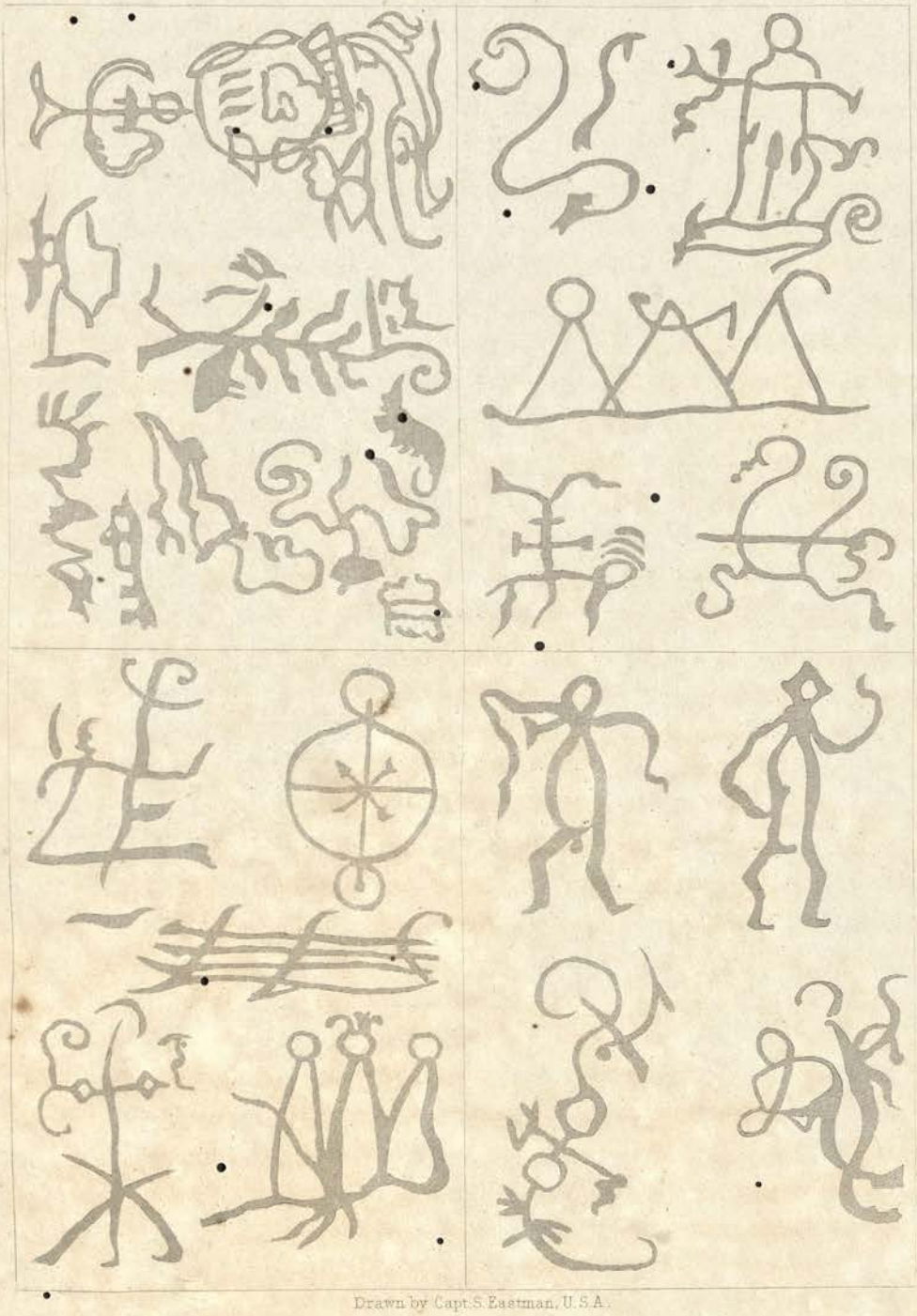
[1] An Historico-Geographical Description of the North and Eastern parts of Europe and Asia, but more particularly of Russia, Siberia, and Great Tartary, &c. By Philip John von Strahlenberg. London Ed. A. D. 1738.





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TRANSCRIPT FROM THE RIVER IRTISH, TARTARY.

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The figure beneath them, on the right, is a warrior on horseback, armed with a bow and arrow. On the left of this device, the two trees are evidently designed to symbolize medicinal plants.[1]

In the drawings A and B, Plate 64, there is a strong resemblance to the free style of figuring, of which Mr. Catlin has furnished examples, as existing on buffalo-robes, among the tribes who possess horses, and hunt on horseback on the Missouri plains. In these Siberian sketches the hand of a higher grade of art is, however, manifest.

That the simple style of rock inscription, among the Mongolian and Tartar races of the eastern hemisphere, bears a marked resemblance to that of the red race of the western, is denoted in the following examples. (See figure 6, Plate 66, and figures 1, 2, 3, 4, Plate 67.) In figure 6, Plate 66, the drawing of a frocked man, with a heart lying at his feet, is suggestive of the office of a priesthood, among a barbarous people. The stems of shrubs, sprouting from one lobe of the heart, may symbolize a fragrant memory. The figures of high crosses raised upon a sort of rampart, appear to indicate towns, forts, or localities. The circle divided into eight parts, appears to be horologic. In figure 1, Plate 67, the deer stands as a simple symbol; in figure 2, of the same plate, the dart has the same value. In figure 3 of this plate, the reader is strongly reminded of a curious stone map, found on the sources of the Susquehanna, of which a transcript was published by the Historical Committee of the Pennsylvania Philosophical Society. In figure 4, as in some characters in figure 2, there is a strong tendency to the ancient rock-alphabet.

In the latter part of the 17th century, the government of Sweden employed a Mr. Scheffer, a professor of the University of Upsal, to travel into Lapland, to give a particular account of that but imperfectly-known part of the Swedish dominions. Amongst other subjects which he describes in his work, giving the results of this journey, he furnishes the following examples of their picture-writing, as illustrations of the ancient magical arts of the people, prior to the introduction of Christianity into Lapland.[2] The account which he gives of the "magical ceremonies and arts of the Laplanders," is a very curious chapter in the history of human superstitions; and exhibits, as a whole, a remarkable coincidence with the system of demonology existing under the name of medas, jossakeeds, wabenos, and professors of soothsaying and medical magic, in the western hemisphere.

Scheffer's figures are copied from the heads of the drums employed by the Lapland sorcerers and magicians. These drums are one-headed, consisting of a skin drawn

[1] In Figures 1 and 2, Plate 66, are given representations of two pieces of sculpture, which do not surpass the art that has been found to be displayed by numerous representations of birds and quadrupeds, covered upon the antique pipes of the Mississippi Valley.

[2] The History of Lapland, containing a Geographical Description and a Natural History of that Country, with an Account of its Inhabitants, their Original Religion, Customs, Habits, Marriages, Conjurations, Employments, &c. Written by John Scheffer, Professor, &c. London Ed. 1704.

tightly over a wooden hoop, and fastened with pegs. They are generally ovate, and differ much in size. They seldom exceed eighteen inches in diameter, and are often less. The figures are drawn on, or rather stained into the skin, by a red liquid or pigment, prepared from the bark of the alder. They are struck with a drum-stick, or instrument resembling a ring. The music is accompanied with songs and incantations. In these songs their gods, spirits, or demons are addressed. The operators profess both to foresee and to produce events. They profess to furnish or allay winds on the sea; to cure or cause diseases; to perform magical journeys in the air, or under the earth; to influence the courses and ranges of wild or tame animals; and to exercise, without limitation, those powers which appertain to the ideas of witchcraft, sorcery, and magic.

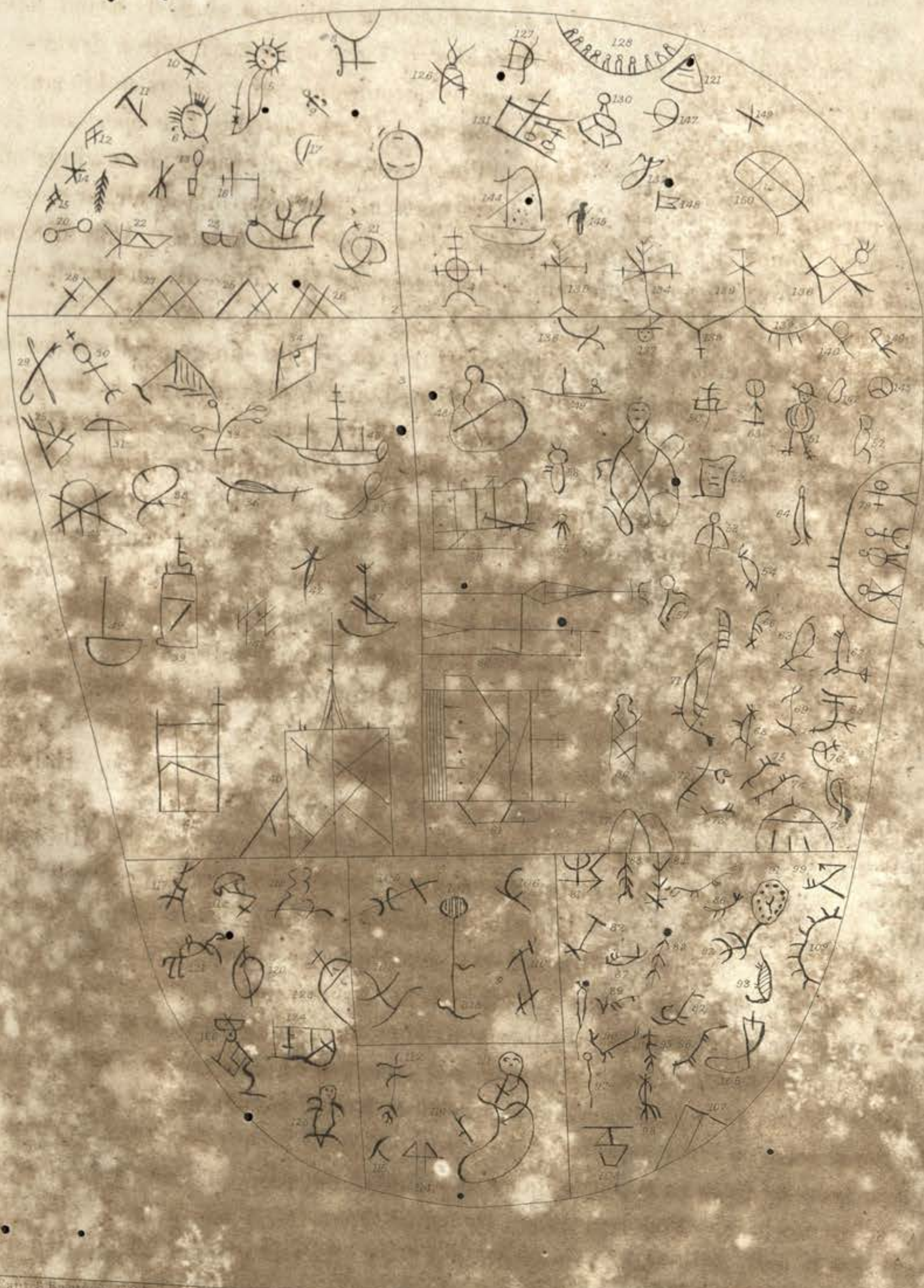
Their principal deities are Thor and Storjunkare. The sun generally occupies the centre of the drum, surrounded by the moon, stars, birds, quadrupeds, reptiles, and various terrestrial or fabulous objects. The following transcripts, marked A and B, in the original work of Mr. Scheffer, exhibit two of the ordinary drums. Figure a represents Thor; b, his attendants; c, Storjunkare, and d, his attendants; e, birds; f, stars; g, Christ; h, his apostles; i, a bear; k, a wolf; l, a reindeer; m, an ox; n, the sun; o, a lake; p, a fox; q, a squirrel; v, a serpent. Here is, it will be observed, but little admixture of Christianity; it is merely taking into the number of things worshipped or relied on, or otherwise made the objects of occult energy, the name of Christ, showing the historical fact of the introduction of Christianity into the country at this period.

In the drawing B, a, denotes the Supreme Being; b, the Saviour; c, the Holy Spirit; d, St. John; e, death; f, a goat; g, a squirrel; h, heaven; i, the sun; l, a wolf; m, a fish called scik; n, an owhr cock, or wild cock; o, friendship with the wild reindeer; p, Annundus Erici, the owner of the drum, being in the act of killing a wolf; q, gifts; r, an otter; f, a symbol of friendship with other Laplanders; t, a swan; v, a sign to try the disposition of others, and whether a distemper be curable; x, a bear; y, a hog; B, a fish; V, one carrying a soul to hell. What associations!

Each operator appears to be at liberty to introduce such figures as suit his fancy, belief, or superstitions. Geographical or astronomical visions are generally drawn on the painted skins, by which there is supposed to be an association of objects deemed to be congruous.

A few general facts in the principles of pictorial notation of the Laplanders, may, however, be noticed. The sun bears its usual figure of a man's head, rayed. The same figure is used on a basis, representing a body, for the two gods Thor (who represent the great power of Good,) and Storjunckare, (the antagonistic power of evil,) and, also, on a cross, the same symbol stands for the servants of each god. Stars are represented by two parallel lines, crossed at an acute angle by two similar lines, describing a rhomb in the centre. Birds are denoted by a simple skeleton of a body, and

Plate 68



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Illman & Sons

LAPLANDISH DRUM HEAD

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wings, making a cross. Death, by a monument crowned with a wreath. Various animals and reptiles by appropriate figures, as a reindeer, a squirrel, a serpent, a vulture. But these animals are generally mystified in their forms, and denoted by symbols which can only be interpreted by the sorcerer. Other symbols are wholly arbitrary, as a circle crossed, to denote gifts, waved lines to denote a lake, an ellipsis for friendship, &c. Much of each inscription would be wholly unintelligible without verbal explanation from an initiate in the mysteries. In Plate E, the figure of a closed cross, which is used on some of the North American inscriptions to denote death, occurs five times; but we have no interpretation of this. On Plate F there are no less than two-and-twenty figures, which may be supposed to have an alphabetical power. Both these inscriptions express, by division lines, the relative position of Sweden, Norway, and Lapland. They are, likewise, replete with figures of a frocked priesthood, clearly denoting the Christian church of the period.

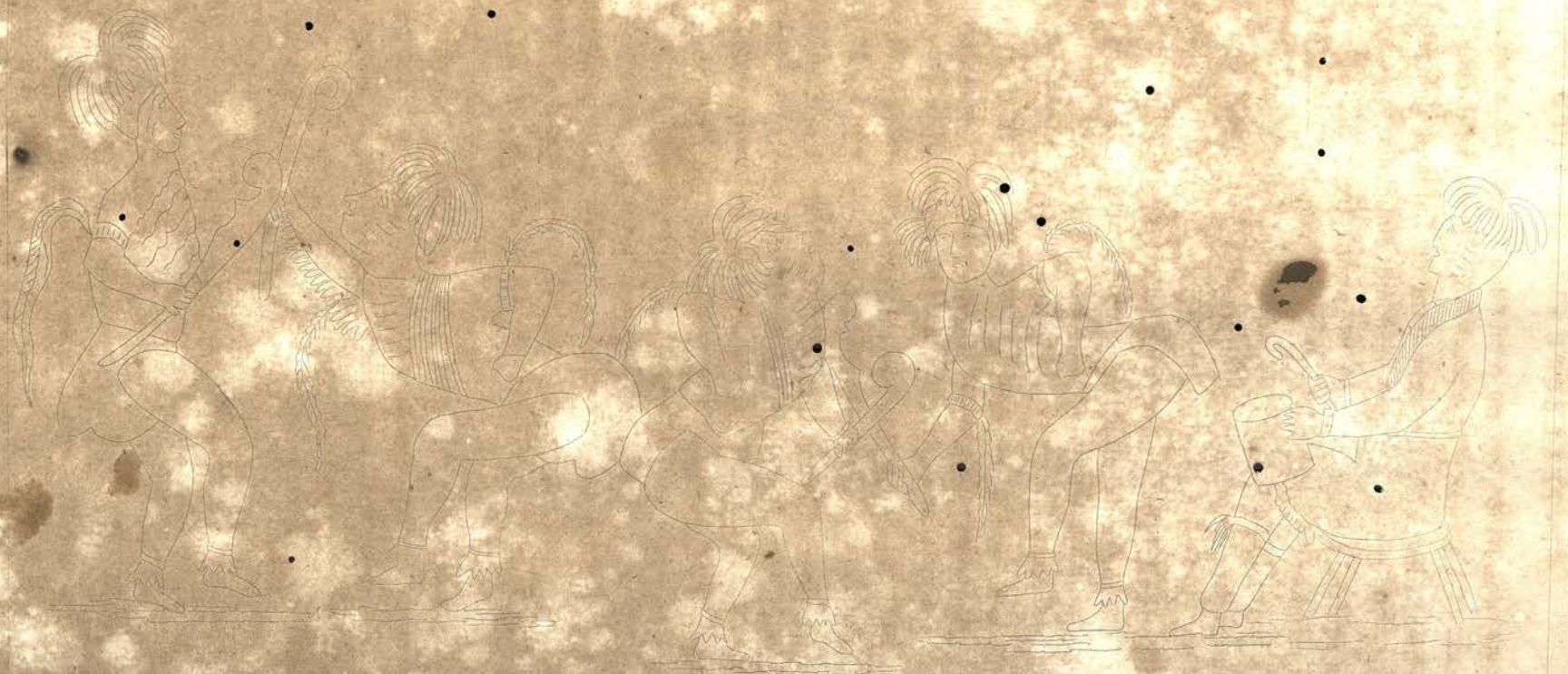
If, as has been remarked above, these examples denote a variety and want of uniformity in the symbols, or a great many homophonous characters, this fact is still further apparent in the subjoined transcript, Plate 68, which was copied in 1673 from one of the largest of the Lapland drums, then in the possession of Lawrence Althmack, a citizen of Stockholm. Fortunately, also, for the study of this subject, we have a full explanation of the characters and figures, by a Laplander, a native of Torna. Not less than one hundred and fifty characters are inscribed on this drum. They relate to necromancy, geography, natural history, law, medicine, astrology, demonology of the grossest type, and, in truth, every possible subject which could occur between the operator, or incantator, and the object of his incantations.

Figure number 1, is a symbol of Paul of Torna; 2, is the river of Torna, and 3, a tributary of it; 4, a weathercock, pointing to the north; 5, a symbol denoting God; 6, the sun; 7, the moon; 8, thunder; 9, a divine angel; 10, the angel Gabriel; 11, St. John; 12, St. Peter; 13, St. Matthew; 14, St. Martin; 15, St. Luke; 16, God's sergeant; 17, rain; 18, the light of the sun; 19, the wind; 20, good fortune; 21, bad fortune; 22, the earth; 23, water; 24, fire; 25, dedicated to sacrifices; 26, another form of the same altar; 27, the mountain Stateberg, a place of sacrifice; 28, the mountain Titro, also a place of sacrifice; 29, Sweden; 30, Prussia; 31, Holland; 32, England; 33, Spain; 34, France; 35, Cologne; 36, Turkey; 37, Lapland; 38, Finland; 39, the cities of Finland; 40, the cities of Sweden; 41, the cities of Germany; 42, the village of the laborers; 43, war; 44, peace; 45, some persons going to church; 46, a great ship; 47, a shallop; 48, a Lapland idol; 49, the devil's boat; 50, the holy tree of the Laplanders; 51, a citizen; 52, his wife; 53, a countryman; 54, his wife; 55, a Laplander, or his wife; 56, the governor of Lapland; 57, the governor's gentleman; 58, a bailiff; 59, a Lapland church; 60, the church of the city of Torna; 61, the country church of the Lapmark of Torna; 62, the holy stone of the Laplander; 63, the trunk of the holy tree of the Laplanders; 64, a bear; 65, a cow;

66, an ox; 67, a wolf; 68, a reindeer; 69, a sheep; 70, a hog; 71, a horse with a long tail; 72, ——; 73, a swan; 74, ——; 75, a great wild cock; 76, a Laplander travelling in his sledge; 77, the mountain of Lapland dedicated to sacrifices; 78, a Lapland hut; 79, the most dangerous and malicious sorcerers; 80, a priest; 81, a man; 82, a squirrel; 83, a fir tree; 84, a pine tree; 85, a hare; 86, a fox; 87, the young of a reindeer; 88, a birch tree; 89, a cat; 90, ——; 91, a lake or bog, with fishes and a boat; 92, a beaver; 93, an animal called jerf, or gouli; 94, ——; 95, a dog; 96, an oroskre, or ornokre, signifying the cast-off skin of a serpent; 97, a serpent; 98, a frog; 99, the god Nao; 100, the devil's ditch; 101, the genius of the mountains; 102, the hill of hell; 103, death; 104, an otter; 105, Lucifer; 106, Asmodeus; 107, a tyre, that is, a magical ball; 108, magical arrows; 109, denotes, it has happened according to the devil's will; 110, denotes the reverse, *i. e.* that it has happened contrary to the devil's intention; 111, the same devil; 112, his sergeant or officer, who attends constantly on his person; 113, the kettle of hell; 114, spectres; 115, ——; 116, —— of hell; 117, the first president of the assembly of magicians; 118, the second president of the same assembly; 119, the third president of the same assembly; 120, the fourth president of the same; 121, the sorcerers going to their place of meeting with those children whom they instruct in magic; 122, the place where the sorcerers assemble, with their chief masters; 123, the district of Drontheim; 124, the gallows; 125, the prison; 126, the chief judge; 127, a symbol of the law; 128, the twelve judges; 129, the chamber where the judges sit; 130, the presiding judge; 131, a symbol denoting what is law; 132, a symbol denoting what is not law; 133, the feast of the nativity of Christ; 134, Easter day; 135, Whitsuntide; 136, the feast of ——; 137, St. Mary's, or midsummer day; 138, the day of the sun; 139, St. Eric's day; 140, St. John's day; 141, St. Peter's day; 142, St. James' day; 143, St. Michael's day; 144, to denote an acceptable sacrifice; 145, symbolic of one who speaks truth; 146, those who are pernicious to the earth and to the waters; 147, death; 148, sickness; 149, a mortal wound given with a magical javelin; 150, device to denote an interdiction to sacrifice to any god of the mountains, to the trunk of a tree, or to a stone, because it will be vain and unsuccessful.

If a Lapland drum could speak, in magic tones, on so many subjects, it would seem to require, in order to give force to their expression, but the words of the incantation of the North American chief, (Vide ante,) "Hear my drum," or the voice of the whole of these 150 diverse Lapland symbols, and images of things in heaven, earth, and hell, speaking at once. It has been stated that the cuneiform character has revealed the true elements of an alphabetical system. Some of its accompaniments were, however, representative or pictorial. Such is the triumphal record of the conquests of Darius on the rock of Belistun, as given by Major Rowlinson.[1] (See Plate 69.)

[1] Royal Asiatic Society. "The Persian Cuneiform Inscription at Behistun," &c., by Major H. C. Rowlinson, C. B. of the Hon. East India's Service, &c., London, 1846.



Drawn by Capt. S. Eastman U.S.A.

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In this pictorial group the monarch is represented as the military conqueror of ten kings, nine of whom are chained together by the neck, and the tenth drawn prostrate, with the king's foot on his breast. Behind him stand his principal war-captains, drawn very much in the manner of the Mohawk chiefs who, in the Iroquois pictography, offer the chief-rulership to Atotarho. Above the group is represented the Persian god, Ormusd, who, by the ring about his body, and also by the circle in his hand, carries the symbol of eternity.

In the specimens of Iroquois pictography, which are now introduced, a style of drawing is observed which gives more muscular development to the human figure than is common with the remote forest tribes. In Plate 70, the first ruler of the tribes, under the confederacy, is depicted. Besides great military prowess, tradition gives him the reputation of a sorcerer or necromancer. The most noxious animals were harmless to him under the power of his charms; he is therefore drawn surrounded with rattlesnakes, who defend him on all sides. His perfect composure is shown by the calmness with which he indulges the pipe — thus offering a species of frankincense to the spirit who sustained him. Before him stand two Mohawk war-chiefs, who offer him the simple staff of Iroquois sovereignty.

Plate 71. In this group we are presented with an Iroquois dancing party. The singer and drummer sits upon a stool. The dancers wield their clubs, and put themselves in the most contorted positions. It is a war-group. Wreaths depend from their elbows. Feathers decorate their heads. Their moccasins are cut like a ducal crown reversed.

Plate 72. National tradition, in this group, perpetuates one of its principal superstitions. It is that of the fairy flying heads — an evident allusion to meteoric displays. Figure 4 embodies the main idea. Rays or flashes of fire are symbolized with a face and claws. A woman sitting and roasting chestnuts before the fire, with her dog, is mistaken, by this mysterious visitor, for a fire-eater. The act is considered paramount to his own.

Plate 73. This plate represents the Stonish Giants — a prime recital in Iroquois history. Who the giants are designed to symbolize is uncertain. They are represented as impenetrable by darts. Did ever an enemy, clothed in armor, visit this nation? Or, do the Stonish Giants symbolize the first enemy they met with fire-arms? The retreating warriors and the inefficacy of their darts are shown, as if they fled from mailed warriors.

We subjoin a specimen of the pictographic art for the tribes of Oceanica.

In Freycinet and Arago's voyage to the Eastern Ocean, they obtained and published a specimen of the mode in which rude nations express their wishes pictorially, which may serve as an introduction to the less elementary method of the North American tribes. See C, Plate 47. The author of this symbolical letter was a native of the

Caroline Islands, a Tamor of Sathoual, who wished to avail himself of the presence of a ship to send to a trader at Rotta, M. Martinez, some shells which he had promised to collect in exchange for a few axes and some other articles. This he expressed to the captain, who gave him a piece of paper to make the drawing, and satisfactorily executed the commission. The figure of a man at the top denotes the ship's captain, who, by his outstretched arms, represents his office of a messenger between the parties. The rays, or ornaments on his head, denote rank or authority. The vine beneath him is a type of friendship. In the left column are depicted the number and kind of shells sent; in the right column the things he wished in exchange, namely, seven fish-hooks, three large and four small — two axes and two pieces of iron. This request, the journalists state, was accurately fulfilled, and the exchange adjusted to the full satisfaction of the Tamor.

VII. POPULATION AND STATISTICS. A.

VII. POPULATION AND STATISTICS.

THE aboriginal population of America was over-rated from the beginning; and the same spirit of exaggeration which actuated the early discoverers, has continued to throw its influence over every period of our history. It is not probable that, at the opening of the sixteenth century, or any other period which may be selected, the number of souls upon the Indian territory, bore any very considerable ratio to the number of square miles of country which they occupied in the shape of villages, or hunting grounds. The hunter state requires, indeed, that immense districts of forest should be left in the wilderness condition, that its objects may be properly accomplished. From some data that have been employed, it is doubtful whether an area of less than fifty thousand acres, left in the forest state, is more than sufficient to sustain by the chase a single hunter.

Most of the tribes living in districts where game abounded, relied almost exclusively upon that resource for a subsistence. The zea maize was cultivated in all the southern and middle latitudes of the territory of the United States, not as furnishing the staple of life, but as a mere subsidiary means of subsistence. This can be said of the ancient Floridians, amongst whom De Soto marched, and will hold good, if the remark be applied to the Muskogees, the Choctaws and Chickasaws, and the Cherokees, of the earlier periods of our history.

The common deer was found to inhabit all the latitudes from the Gulf of Mexico to the shores of the Great Lakes. The black bear extended its ranges to an equal extent. The elk (*C. Canadensis*) was an inhabitant of the North Atlantic forests, and was found by the hunter west of the Alleghanies, and as far south as the forests of Louisiana and the prairies of Texas.

The moose (*C. Alces*) was killed in Pennsylvania, and characterized the forests of New England and the entire range of the Lake States. To these animals, which furnished the common viands of an Indian's lodge, were added, for all the region west

of the Alleghanies, the bison of the west, (*Bos Americanus,*) the prominent object and glory of the chase for the tribes of these latitudes. For these prime objects of prey, the Indian disputed with the wolf, the northern cougar, or panther, and the northern hyena.

If, with the ample means and sparse population of the continent, the Indian had devoted himself to the arts of peace, the aboriginal population would undoubtedly have far transcended any modern estimates that have been submitted. But the reverse was singularly true; and, while he maintained an active war on the native quadrupeds, this struggle was but secondary compared to his incessant, blood-thirsty, and perfidious war against his own species. Every element of tribal discord was there in active operation, long before the continent was discovered; and it is inferable that the population barely sustained itself, but did not advance, for centuries.

The Iroquois, who appear to have perceived this cause of depopulation, and adopted the principles of a confederacy, reaped the highest advantages from it, and, in a comparatively few years, extended the terror of their name from New York and New England, throughout all New France, quite to the shores of the Gulf of Mexico.

The discovery of America, and the planting of the colonies, put a new phasis on all this. By the introduction of fire-arms, and by creating a market for furs, the real objects of the chase were entirely changed. Hunting was altered from a manly pastime to a money-making pursuit. The beaver, otter, mink, musk-rat, and other small animals, which had before-time been sufficient for their food and clothing, acquired a sudden value, and the Indian's appetites were stimulated by every possible inducement of foreign production, to exert all his powers in the chase. The consequence was, that large tracts of land were soon exhausted, and remote forests invaded. The countries in which game failed became of little use to them, and were easily parted with for the means of gratifying their newly-awakened passions, and they retired farther into the wilderness. The Anglo-Saxon trod closely on their heels, following with the plough the circle before gleaned with the rifle, the gun, and the trap.

Amongst the inducements furnished the Indian, to urge him on in the chase of the furred animals, nothing has been so deleterious as the introduction of distilled spirits. A taste for this was soon created, and it has spread far and wide. Years have only confirmed the general habit. It has paralyzed his powers as a hunter, and done more than all other causes put together, to produce depopulation.

Another cause, which has but recently been demonstrated, though long suspected, is the payment of cash annuities to tribes per capita, or otherwise. The necessary result of the sale of their lands, of which the quantity held becomes excessive in their hands, by the failure of the chase upon them, is the accumulation of large sums, which it is customary, in general, to pay in the form of annuities. This custom is universal, it is believed, in our intercourse with the non-industrial or hunter tribes.

Reference to the following tables of statistics denotes that the hunter tribes, who rely, largely, on these cash annuities, become careless in their ordinary pursuit of the chase. The temptation to idleness is too strong for resistance in the Indian mind. While the use of the trap is neglected, debt is incurred for the means of clothing and subsistence. It is not to be expected that the ordinary principles of commerce will be intermitted in the intercourse of our frontier citizens with those moneyed tribes. Credit will follow, as in ordinary cases, the known means and disposition of payment.

The Indian is a man who, whatever may be his idiosyncracies, is prompt to acknowledge his obligations to discharge his debts, tribal and personal, and who is ever ready, when his means will permit it, to cancel them: *this* is characteristic of the moral sense of the tribes. No man, who has had opportunities of frequent observation of their character and customs, will, it is apprehended, deny this noble trait of tribal honesty and fair dealing. The history of our Indian treaties is a standing commentary upon its truth, in every age of our republic.

That these hunter tribes should not perceive that the annual distribution of the principal of their funds, instead of the interest of it alone, is certain, in all the cases of limited annuities, to deprive them, in a few years, of every agricultural and educational means of improvement, should not excite surprise. They have not yet reached a point of civilization from which they can, calmly and truly, estimate their position. They are, at the same time, urged to continue the system by considerations of self-gratification, which it is not easy for them to resist.

It will be further perceived, that those tribes whom we are to regard, if not in the mass, yet in their chieftaincies, governments, and leading men, as semi-civilized, have developed better fiscal abilities, while, in many instances, the principles of investment and funding, adopted by them, are replete with the best axioms of political economy.

While the hunter and barbarous tribes thus persist in a policy which must be fatal to their financial prosperity, it is a question of moment, whether the ready means thus supplied to them of self-indulgence, in the use of distilled spirits, is not hurrying them onward in a career that must end in their moral wreck. It is seen, from the inquiries that have been thus far made, that small tribes, who, but a few years ago, were prosperous, and had kept up, if not increased, from the era of 1814, in their numbers, have, under the influence of high cash annuities, and unlimited credit, been hurried on in the triple career of intemperance, depopulation, and moral degradation. Such, indeed, is their fearful progress in this course, that a few years must result in the entire extinction of some well-known tribes. Nations who were, but a few years back, fearful in their native strength, under the banners of a Tecumseh, a Little Turtle, and a Black Hawk, have fallen under influences more fatal to them than the rifle, the sword, and the camp-fever. If the Miamies, portions of the Sauks and Foxes, and the Winnebagoes, could be persuaded of the hasty and downward steps

which they are making in this descending moral scale, it is believed that they would pause in their alarming course of depopulation, and revert to a healthier policy.

The statistics which are presented have been wrung from the tribes. Conscious, themselves, of a paucity in their industrial means, and of a disregard of the soundest maxims of civilized life, they have resisted, if they have not often misunderstood, the humane policy which dictated the investigation. Instead of thereby seeking to acquire means of laying a tax on their property — an idea preposterous in itself, as none but citizens can, under the constitution, be taxed, the inquiry merely contemplated the acquisition of information which might show their condition, and would be of incalculable value to Congress, in more perfectly adapting its laws to it. I have, in a preceding place, adverted to the difficulties in the way of prosecuting the statistical inquiries among the tribes; but no obstacle is of sufficient weight to deter from the effort; nor can there be a reasonable doubt of ultimate and complete success.

The field of investigation has been enlarged by our recent acquisitions of territory on our southern and western boundaries, of the Indian tribes of which, we are comparatively uninformed. But this adds another reason to those previously existing, to sanction the original plan of the census and statistics. Whatever system may be adopted in relation to the cash-annuities paid to the hunter tribes, it is desirable that they should be prevented from dissipating their funds on objects not essential to their advance in agriculture, arts, education, morals, and christianity.

The progress which has been made in the aboriginal census and statistics, will be seen by referring to the subjoined tables, in which the facts have been carefully digested. These returns relate exclusively to tribes living east of the Rocky Mountains. Respecting the extreme western tribes situated within the chartered limits of Oregon, the latest official dates received denote fifty-nine tribes, and fragments of tribes, bearing specific names; of which number thirty-four tribes live south, and twenty-five tribes north of the Columbia River. (See Tables, No. 4.) The entire Indian population of this territory is now estimated at 22,033, where Lewis and Clark in 1806 reported 80,000. A great number of dialects are spoken. The constant tendency of the savage and hunter state, as observed in the west, is to make dialects, and to generate petty independencies. Even the Cherokees, Choctaws, and other semi-civilized tribes, resist confederation. Change of accent, and peculiarities of intonation, are perpetual and rapid causes of mutations in their languages.

Mr. Hale, the ethnographer of the United States Exploring Expedition, reports four divisions of Indian population by geographical boundaries, spreading along the Pacific coast, between California and the peninsula of Alasca, in north latitude 60°. They are as follows:—

1. North-west division.—Latitude 52° 2′, to Charlotte's Sound and Alasca, 60°.

2. North Oregon division.—All north of the Columbia to latitude 52°, except Prince of Wales Island, and three or four south.

3. South Oregon division.— Sa-aptins, Walla-wallas, &c.

4. California division.— Darker shade — inferior physical type.

These divisions are not established physiologically: the era being prior to the settlement of the Oregon question, also renders the divisions imprecise for civil purposes. Division number one is wholly without the limits of the United States. Of division number two, extending north of the Columbia to latitude fifty-two degrees, three degrees of the coast have been assigned to British Oregon, or New Caledonia.

By dividing the American territory into North and South Oregon, by the line of the Columbia, as it has been done by Governor Lane, the results of whose reports are given in the statistical tables herewith, the tribes are now accurately designated, agreeably to our civil limits, as above expressed. (See Tables No. 5.)

In order to group the Oregon Indians agreeably to languages, our information is inadequate. Mr. Hale subdivides the leading coast divisions into thirteen sections; of which the thirteenth section, being the Blackfeet, or Satsika, comprises tribes who dwell wholly eastward of the Rocky Mountains, and are not, in any sense, properly considered as Oregon Indians. This section is redivided into Satsika, Blood Indians, Piekans, and Atsinas, or Fall Indians, who, speaking one generic language, (the Atsina-Algonquin,) constitute the chief known local divisions of the people. They dwell on the Saskatchiwine, of the Great Lake Winnipec, of Hudson's Bay, and on the Upper Missouri, and its higher north-eastern tributaries. They are found by their vocabulary, according to Mr. Mackenzie, to speak a dialect, much altered, of the Algonquin. It is certain that important portions of this tribe hunt the plains south of latitude 49°, and are therefore within the United States.

The Shoshonees who occupy the upper waters of the Lewis or Snake River, spread throughout the Great Salt Lake Basin, and cross the mountains south into Texas.

The Unikwa, the Contamis, or Flat-Bows, and the Salish families, (sections 1, 2, 3, of Mr. Hale,) are located wholly (or with the exception of g, h, j, k, l, of the latter) north of the boundaries of Oregon. Abstracting these families from the sections enumerated, we have pretty fully eight sections of tribes or families, estimated by him; or, agreeably to the late official statements of Governor Lane, fifty-nine local tribes, numbering 22,000 souls, as the subject of our future investigations in Oregon.

CENSUS RETURNS

OF THE

INDIAN TRIBES OF THE UNITED STATES,

WITH THEIR

VITAL AND INDUSTRIAL STATISTICS;

TAKEN UNDER

The Fifth Section of the Act, approved March 3d, 1847, amending the Act to organize the Indian Department

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls, of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or White Heads of Families, Male.	9 Number of European or White Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	24	153	44	39	30	33	7	.....	.....	1	
		2.	Oneidas of Green Bay	Wisconsin	150	762									
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	61	312	71	75	80	84	2	.....	.....	1	
		4.	Onondagas of Cattaraugus	New York	24	64	17	17	18	10	2	.....	.....	2	
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York	.....	150									
4.	SENECAS	6.	Senecas of Cattaraugus	New York	124	657	177	179	131	150	20	3	3	7	4
		7.	Senecas of Buffalo	New York	179	656									
		8.	Senecas of Tonawanda	New York	109	668	198	144	129	139	58				
		9.	Senecas of Alleghany	New York	125	582	151	140	127	128	36	.....	.....	4	5
		10.	Senecas of Conawango	Pennsylvania	8	55	8	12	15	17	3	.....	.....	.....	1
		11.	Senecas of Neosho	West of Arkansas	33	158	34	23	54	46	1				
5.	TUSCARORAS	12.	Tuscaroras	New York	45	285	65	87	58	58	17	.....	1	3	1
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	123	450	111	126	92	110	11	3	1		
7.	WYANDOTS	14.	Wyandots	West of Missouri	117	687	240	148	147	134	18	3	17	23	22
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	43	273	56	61	62	89	5				
					1165	5912	1172	1051	943	1008	180	9	22	41	33

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	2	3	4	.....	3	.....	...	...	...	2	22	2
		2.	Oneidas of Green Bay	Wisconsin												
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	7	7	6	6	2	...	...	...	.....	65	
		4.	Onondagas of Cattaraugus	New York	.....	2	2	3	2	.....	1	...	...	1	9	
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York												
4.	SENECAS	6.	Senecas of Cattaraugus	New York	2	14	14	11	6	4	...	...	...	.....	124	9
		7.	Senecas of Buffalo	New York	.....	8	16	13	23							
		8.	Senecas of Tonawanda	New York	14	9	11	5	3	.....	...	...	1	.....	109	4
		9.	Senecas of Alleghany	New York	4	10	13	5	2	1	...	2	...	28	97	2
		10.	Senecas of Conawango	Pennsylvania	1	1	.....	3	4	2	1	...	...	.....	8	1
		11.	Senecas of Neosho	West of Arkansas	.....	5	8	7	4	.....	...	...	...	33	33	
5.	TUSCARORAS	12.	Tuscaroras	New York	5	3	5	6	7	1	1	...	...	.....	45	1
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	1	9	.....	3	6	.....	...	...	...	2	98	
7.	WYANDOTS	14.	Wyandots	West of Missouri	2	9	3	3	1	.....	...	1	...	.....	115	4
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	.....	6	15	4	3	.....	...	...	...	43	43	1
					31	86	98	69	70	10	3	3	1	109	768	24

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	24 Number of Females employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	3	.....	.....	1	.....	.....	1	16	11	4
		2.	Oneidas of Green Bay	Wisconsin	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	50	
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	1	1	.....	.....	.....	.....	.....	.....	26	13	9
		4.	Onondagas of Cattaraugus	New York	.....	1	1	.....	.....	.....	.....	.....	.....	7	6	10
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York												
4.	SENECAS	6.	Senecas of Cattaraugus	New York	1	2	6	1	1	4	.....	3	3	73	69	106
		7.	Senecas of Buffalo	New York												
		8.	Senecas of Tonawanda	New York	.....	1	7	2	.....	.....	1	.....	.....	.....	.....	20
		9.	Senecas of Alleghany	New York	1	1	2	.....	.....	.....	.....	.....	.....	71	48	90
		10.	Senecas of Conawango	Pennsylvania	.....	.....	3									
		11.	Senecas of Neosho	West of Arkansas	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	6
5.	TUSCARORAS	12.	Tuscaroras	New York	1	4	.....	1	.....	2	.....	2	12	13	26	2
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	1	2	.....	.....	1	1	.....	49	38	15
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	.....	2	2	.....	.....	.....	6	.....	24	13	79
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	2
					3	10	27	8	1	10	2	15	16	339	274	343

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	36 Number of Males who are engaged as Teachers.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	1	.....	20	23	2	1	15	10	27			
		2.	Oneidas of Green Bay	Wisconsin												
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	14	8	8	.....	.....	.....	8	.....	.....	4
		4.	Onondagas of Cattaraugus	New York	.....	.....	7	5	15	3	7	1	7	.....	.....	20
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York												
4.	SENECAS	6.	Senecas of Cattaraugus	New York	9	.....	36	38	35	19	46	40	55	7	.....	223
		7.	Senecas of Buffalo	New York												
		8.	Senecas of Tonawanda	New York	.....	.....	.....	.....	12	8	8	6	4	.....	.....	20
		9.	Senecas of Alleghany	New York	.....	.....	35	25	51	27	24	16	34	1	.....	64
		10.	Senecas of Conawango	Pennsylvania	.....	.....	.....	.....	3	.....	.....	.....	1	.....	.....	1
		11.	Senecas of Neosho	West of Arkansas	.....	.....	.....	.....	3	2	.....	.....	2	.....	25	12
5.	TUSCARORAS	12.	Tuscaroras	New York	1	.....	.....	25	10	14	10	9	.....	16	.....	
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	31	32	15	12	4	9	96			
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	.....	10	22	56	40	3	7	18			
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	.....	.....	.....	.....	2	1	.....	.....	2	.....	.....	12
					11		150	178	212	137	117	88	254	24	25	366

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	48 Number of Females who can do Seamstress' or Mantua-makers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.	54 Number of Bushels of Oats raised.	55 Number of Bushels of Beans raised.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	309½	1,885	57	478	910	45
		2.	Oneidas of Green Bay	Wisconsin	.....	.....	2,213					
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	.....	2,216	3,683	446	804	1561
		4.	Onondagas of Cattaraugus	New York	*12*	*347*	*214*	*465*	*60*	*337*	*875*	*33*
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York								
4.	SENECAS	6.	Senecas of Cattaraugus	New York	177	5,077	7,751	8,879	1,804	2,645	10,876	311½
		7.	Senecas of Buffalo	New York								
		8.	Senecas of Tonawanda	New York	50	350	3,500	5,700	1,000	3,584	2,310	200
		9.	Senecas of Alleghany	New York	176	1,904	1,667	1,495	227	1,626	5,436	186
		10.	Senecas of Conawango	Pennsylvania	5	274	152	495	.....	76	380	19
		11.	Senecas of Neosho	West of Arkansas	77	.....	410	10,500	200	660	100	190
5.	TUSCARORAS	12.	Tuscaroras	New York	2	558	2,044	2,811	3,172	384	2,320	55
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	90	2,445	919	3,401	774	510	2,360	290
7.	WYANDOTS	14.	Wyandots	West of Missouri	33	110	1,044	24,162	215	5,530	1,865	249
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	95	1,638	615	14,000	1,800	400	500	129
					717	12,703	30,838½	66,009	13,192	16,676	28,736	3268½

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	1300	.....	.....	...	...	...	286	.....	240		
		2.	Oneidas of Green Bay	Wisconsin											
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	222	99	.....	...	...	...	1,089	1,201	5,024	...	3,323
		4.	Onondagas of Cattaraugus	New York	48	76	10	...	...	...	133	862	750	...	912
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York											
4.	SENECAS	6.	Senecas of Cattaraugus	New York	124	116	20	...	...	...	2,148	6,002	6,880	10	9,607
		7.	Senecas of Buffalo	New York											
		8.	Senecas of Tonawanda	New York	50	100	.....	...	...	...	800	6,000	1,000	...	1,000
		9.	Senecas of Alleghany	New York	68	153	157	...	...	...	1,054	2,375	9,854	...	11,745
		10.	Senecas of Conawango	Pennsylvania	.....	123	.....	...	...	...	39	270	375	...	512
		11.	Senecas of Neosho	West of Arkansas	.....	.....	50	...	...	...	1,320	20,000	.....	...	1,650
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	95	.....	...	...	...	1,331	.....	2,743	...	7,550
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	810	60	.....	...	...	...	89	8,780	10,510	...	1,600
7.	WYANDOTS	14.	Wyandots	West of Missouri	28	.....	374	...	...	...	2,615	31,130	100	...	2,465
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	20	.....	10	...	...	...	1,290	4,300	86	...	800
					2670	822	621				12,194	81,920	37,562	10	41,164

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	67 Pounds of Honey, wild or domestic.	68 Number of Beef Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen	73 Number of Milch Cows.	74 Other Neat Cattle.	75 Number of Sheep.	76 Number of Fleeces sheared.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	12	.....	10	...	.....	23	28	9	9
		2.	Oneidas of Green Bay	Wisconsin	.....	.....	.....	104	...	200	181	110	5	
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	135	.....	.....	59	...	30	102	79	42	
		4.	Onondagas of Cattaraugus	New York	.....	4	$1,222.60	9	...	10	12	22	15	
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York										
4.	SENECAS	6.	Senecas of Cattaraugus	New York	50	77	.....	177	...	69	201	206	420	994
		7.	Senecas of Buffalo	New York										
		8.	Senecas of Tonawanda	New York	100	60	$9,000.00	200	...	80	130	300		
		9.	Senecas of Alleghany	New York	.....	44	$8,601.18	97	...	105	136	206	123	64
		10.	Senecas of Conawango	Pennsylvania	.....	6	$683.38	8	...	2	10	12	20	9
		11.	Senecas of Neosho	West of Arkansas	660	60	.....	251	...	66	120	660		
5.	TUSCARORAS	12.	Tuscaroras	New York	300	26	$7,524.10	116	...	52	84	128	198	153
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	9	$10,220.00	90	...	20	108	39		
7.	WYANDOTS	14.	Wyandots	West of Missouri	3888	21	$45,598.00	351	...	60	200	326		
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	500	87	.....	430	1	80	6	430		
					5633	406	$82,849.26	1902	1	774	1303	2546	832	1229

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	66	7	.....	11	.....	45	9	54	6	.....	8
		2.	Oneidas of Green Bay	Wisconsin	561	69	.....	.....	.....	.....	.....	.....	51	30	
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	340	48	.....	36	3	182	57	142	18	36	36
		4.	Onondagas of Cattaraugus	New York	31	9	.....	9	.....	30	7	25	5	1	6
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York											
4.	SENECAS	6.	Senecas of Cattaraugus	New York	421	90	81	152	6	302	69	236	40	9	61
		7.	Senecas of Buffalo	New York											
		8.	Senecas of Tonawanda	New York	525	79	.....	84	2	294	66	252	30	95	130
		9.	Senecas of Alleghany	New York	518	64	.....	70	.....	269	49	244	18	9	41
		10.	Senecas of Conawango	Pennsylvania	55	7	.....	5	.....	29	5	20	3	.....	6
		11.	Senecas of Neosho	West of Arkansas	900	65	9	35	4	100	10	107	2	.....	300
5.	TUSCARORAS	12.	Tuscaroras	New York	582	51	.....	43	1	120	38	96	40	3	64
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	303	36	11	52	.....	215	53	138	24	11	5
7.	WYANDOTS	14.	Wyandots	West of Missouri	2313	126	43	53	126	269	41	250	34	4	192
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	500	86	12	42	.....	129	10	130	.....	.....	279
					7115	737	156	592	142	1984	404	1694	271	198	1128

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Plue" or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita, received from the Government.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York						6	14	
		2.	Oneidas of Green Bay	Wisconsin								
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York						12	8	81
		4.	Onondagas of Cattaraugus	New York	$247.00		12	$43.75		6	5	20
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York								
4.	SENECAS	6.	Senecas of Cattaraugus	New York	$1,375.00			$10.00	$4.50	32	47	215
		7.	Senecas of Buffalo	New York								
		8.	Senecas of Tonawanda	New York	$4,922.00				$3.00	4	6	658
		9.	Senecas of Alleghany	New York	$2,747.30		202	$614.00	$4.12½	41	49	308
		10.	Senecas of Conawango	Pennsylvania	$165.25				$4.12½	1	2	41
		11.	Senecas of Neosho	West of Arkansas	$3,757.00	$175.00	350		$7.00		2	156
5.	TUSCARORAS	12.	Tuscaroras	New York	$909.00					19	48	
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	$2,789.00					85	90	
7.	WYANDOTS	14.	Wyandots	West of Missouri	$4,596.95				$29.25	49	86	
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri		$1000.00	2000		$5.00			273
					$21,538.50		2564	$667.75		255	357	1752

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	96 Number of Persons who are Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	40	.....	.....	.....	2	.....	.....	.....	30
		2.	Oneidas of Green Bay	Wisconsin									
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	26	.....	.....	.....	.....	14	.....	14	
		4.	Onondagas of Cattaraugus	New York	11	.....	$1,257.55	.....	2	.....	.....	5	
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York									
4.	SENECAS	6.	Senecas of Cattaraugus	New York	235	.....	.....	.....	8	.....	.....	55	400
		7.	Senecas of Buffalo	New York									
		8.	Senecas of Tonawanda	New York	.....	4	$11,204.00	$16.76					
		9.	Senecas of Alleghany	New York	93	6	$9,722.55½	$13.71	8	.....	.....	14	250
		10.	Senecas of Conawango	Pennsylvania	42	.....	$708.13	$12.00					
		11.	Senecas of Neosho	West of Arkansas	153	.....	.....	.....	8	4	.....	5	53
5.	TUSCARORAS	12.	Tuscaroras	New York	107	.....	.....	.....	7	6	5	1	65
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	$2,930.00	.....	5	3			
7.	WYANDOTS	14.	Wyandots	West of Missouri	33	5	$26,392.72	$44.98	10	1	4	.....	100
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	50	.....	.....	.....	6	4	.....	.....	91
					790	15	$52,214.95½		56	32	9	94	989

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	105 Number of the native Priesthood who officiate in the capacity of public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	$180.00					
		2.	Oneidas of Green Bay	Wisconsin								
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	$1,400.30	$292.11	.....	.....	$150		
		4.	Onondagas of Cattaraugus	New York	.....	.....	$48.70					
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York								
4.	SENECAS	6.	Senecas of Cattaraugus	New York	1	$9,500.00	$1,600.00	$50				
		7.	Senecas of Buffalo	New York								
		8.	Senecas of Tonawanda	New York								
		9.	Senecas of Alleghany	New York	.....	$3,500.00	$699.00					
		10.	Senecas of Conawango	Pennsylvania								
		11.	Senecas of Neosho	West of Arkansas	.....	$1,250.00						
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	.....	$221.25					
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	$2,131.66						
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	$17,500.00	.....	.....	.....	.....	$500	
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	1	$1,685.00						
					2	$36,966.96	$3,041.06	$50		$150	$500	

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Office Contingencies.	115 Aggregate Sum expended by Government for Agents and all other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents.	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.	121 Number of Farmers and Assistants.	122 Number of Carpenters.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	.....	.....	.....	.....	1	.....	.....	3
		2.	Oneidas of Green Bay	Wisconsin										
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	.....	.....	.....	.....	.....	.....	1	
		4.	Onondagas of Cattaraugus	New York										
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York										
4.	SENECAS	6.	Senecas of Cattaraugus	New York	.....	.....	.....	.....	1	1	2	.....	.....	6
		7.	Senecas of Buffalo	New York										
		8.	Senecas of Tonawanda	New York										
		9.	Senecas of Alleghany	New York	.....	.....	.....	.....	1	.....	2	1	.....	2
		10.	Senecas of Conawango	Pennsylvania										
		11.	Senecas of Neosho	West of Arkansas	$171.25	$100	$3,232.73	.....	1	.....	1	2		
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	.....	.....	.....	.....	.....	3	.....	25	4
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	.....	.....	1	.....	1			
7.	WYANDOTS	14.	Wyandots	West of Missouri	$220.00	$264	$1,770.00	.....	1	.....	1	2		
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	$171.25	$100	$3,232.75	.....	1	.....	1			
					$562.50	$464	$8,235.48		6	1	12	6	26	15

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	1	1	.....	.....	.....	1	1	1	$325.00		
		2.	Oneidas of Green Bay	Wisconsin	...	...	.....	.....	.....	.....	.....	.....	.....	2	1
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	...	1	.....	.....	1	.....	1	.....	$800.00	1	1
		4.	Onondagas of Cattaraugus	New York	...	...	1	.....	1	1	1	1	$1,560.00		
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York											
4.	SENECAS	6.	Senecas of Cattaraugus	New York	6	...	.....	.....	1	2	2	2	$1,500.00	1	
		7.	Senecas of Buffalo	New York											
		8.	Senecas of Tonawanda	New York	...	...	.....	.....	1	.....	.....	1	$500.00	1	
		9.	Senecas of Alleghany	New York	...	1	1	.....	3	2	4	1	$1,720.00	11	
		10.	Senecas of Conawango	Pennsylvania											
		11.	Senecas of Neosho	West of Arkansas	1	...	.....	.....	1	.....	.....	.....	$4,000.00	1	1
5.	TUSCARORAS	12.	Tuscaroras	New York	...	2	1	.....	.....	1	1	2	$1,400.00		
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	...	...	.....	.....	.....	.....	1	.....	$350.00		
7.	WYANDOTS	14.	Wyandots	West of Missouri	...	...	.....	.....	1	1	3	1	$2,500.00	1	
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	...	...	.....	.....	1						
					8	5	3		10	8	14	9	$14,585.00	18	3

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	7	.....	.....	.....	10	.....	.....	.....	.....	10
		2.	Oneidas of Green Bay	Wisconsin	.....	1	15									
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	15	.....	1	.....	.....	.....	.....	.....	.....	225
		4.	Onondagas of Cattaraugus	New York	.....	.....	2	.....	.....	.....	5	.....	1	.....	.....	28
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York												
4.	SENECAS	6.	Senecas of Cattaraugus	New York	.....	.....	40	.....	.....	.....	30	.....	.....	.....	.....	150
		7.	Senecas of Buffalo	New York												
		8.	Senecas of Tonawanda	New York	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	200
		9.	Senecas of Alleghany	New York	.....	.....	6	.....	.....	.....	5	.....	3	.....	.....	210
		10.	Senecas of Conawango	Pennsylvania												
		11.	Senecas of Neosho	West of Arkansas	.....	.....	1	.....	.....	1	1					
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	2	18	.....	.....	.....	4	.....	.....	.....	.....	90
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	137
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	.....	1	.....	.....	.....	2	.....	1	.....	.....	12
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	4
						3	123		1	1	57		5			1066

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *engagés* employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	.....	.....	.....	.....	.....	.....	.....	74	
		2.	Oneidas of Green Bay	Wisconsin										
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	.....	.....	.....	.....	.....	.....	295	
		4.	Onondagas of Cattaraugus	New York	.....	.....	6	.....	.....	.....	.....	4	8	1
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York										
4.	SENECAS	6.	Senecas of Cattaraugus	New York	1	.....	.....	.....	.....	.....	.....	600	.....	3
		7.	Senecas of Buffalo	New York										
		8.	Senecas of Tonawanda	New York										
		9.	Senecas of Alleghany	New York	.....	.....	6	.....	.....	.....	.....	36	96	3
		10.	Senecas of Conawango	Pennsylvania										
		11.	Senecas of Neosho	West of Arkansas	.....	1	.....	2	4	.....	.....	80	54	
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	.....	.....	.....	.....	.....	.....	.....	45	3
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	.....	.....	.....	.....	.....	$400.00	.....	.....	5
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	.....	2	2	.....	.....	$8,000.00			
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	.....	.....	.....	.....	.....	.....	.....	150	100	4
					1	1	14	4	4		$8,400.00	870	672	19

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians who live in the Tribe, but are not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African descent.	164 Number of Captives taken or adopted from other Tribes.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	30	40	20	147	6			
		2.	Oneidas of Green Bay	Wisconsin	.....	.....	.....	120					
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	.....	35	20	60	40	44	1	
		4.	Onondagas of Cattaraugus	New York	.....	.....	20	9	22	6			
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York									
4.	SENECAS	6.	Senecas of Cattaraugus	New York	1	75	150	85	.....	40	3		
		7.	Senecas of Buffalo	New York									
		8.	Senecas of Tonawanda	New York	.....	.....	.....	.....	.....	.....	13		
		9.	Senecas of Alleghany	New York	.....	.....	82	94	250	50			
		10.	Senecas of Conawango	Pennsylvania									
		11.	Senecas of Neosho	West of Arkansas	.....	12	12	2	153	5	7		
5.	TUSCARORAS	12.	Tuscaroras	New York	.....	15	45	67	257	35	.....	.....	89
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	229	227	175	.....	50			
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	77	77	240	507	68	.....	9	
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri	2	1	.....	.....	269	4	.....	.....	6
					3	439	688	832	1665	304	67	10	98

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

I. IROQUOIS GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	165 Number of Persons who live in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths during the Year.	169 Number of Deaths over Births during the Year.	170 Average Number of Children by each Female, taking those between 16 and 60 years of age.	171 Value of Bead Work.	172 Amount received for Premises leased.
1.	ONEIDAS	1.	Oneidas of Oneida Castle	New York	.....	153	$6\frac{9}{24}$	4	.....	$2\frac{17}{33}$		
		2.	Oneidas of Green Bay	Wisconsin								
2.	ONONDAGAS	3.	Onondagas of Onondaga	New York	.....	408	$6\frac{13}{65}$	2	.....	$1\frac{63}{84}$		
		4.	Onondagas of Cattaraugus	New York	.....	65	$2\frac{17}{24}$	.....	1	$3\frac{4}{10}$		
3.	CAYUGAS	5.	Cayugas of Cattaraugus	New York								
4.	SENECAS	6.	Senecas of Cattaraugus	New York	.....	636	$5\frac{16}{124}$	11	.....	$2\frac{56}{150}$		
		7.	Senecas of Buffalo	New York								
		8.	Senecas of Tonawanda	New York	.....	668	$6\frac{14}{109}$	12	.....	$2\frac{64}{139}$		
		9.	Senecas of Alleghany	New York	.....	586	$4\frac{86}{125}$	16	.....	$2\frac{55}{128}$		
		10.	Senecas of Conawango	Pennsylvania	.....	59	$7\frac{3}{8}$	.....	6	$1\frac{3}{17}$		
		11.	Senecas of Neosho	West of Arkansas	157	158						
5.	TUSCARORAS	12.	Tuscaroras	New York	1	295	$6\frac{25}{45}$	.....	5	$2\frac{36}{58}$		
6.	ST. REGIS TRIBE	13.	St. Regis Tribe	New York	.....	381	5	.....	.....	.....	$1,260.00	$33.00
7.	WYANDOTS	14.	Wyandots	West of Missouri	.....	575	$5\frac{2}{17}$	8	.....	$2\frac{20}{134}$		
8.	SENECAS AND SHAWNEES	15.	Neosho Sub-Agency	Missouri								
					158	3984		53	12		$1,260.00	$33.00

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.
			Detroit Chippewas.																				
		1.	Chippewas of Swan Creek and Black River..	Michigan ...	.....	208																	
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	70	23	4	5	6	8	.....	.....	.....	.....	.....	.....	3	2	4	3			
			Saganaws.																				
		3.	Saganaws of Pewanuganink	Michigan ...	101	102	19	27	24	28	4	.....	2	.....	.....	3	...	1	1	2			
		4.	Saganaws of Natoway's Band	Michigan ...	46	200	54	59	40	40	7	1	.....	2	3	1	1	1	2	4	4		
		5.	Band of Ogakaning	Michigan ...	102																		
		6.	Atawa's Band, Saganaws	Michigan ...	115																		
		7.	Band of Wabeseepenukaning	Michigan ...	23	94																	
			Lake Huron, South.																				
		8.	Chippewas of Thunder Bay	Michigan ...	14	77	19	31	13	13	1	.....	1	10	8	.....	...	3	...	...	1		
			Chippewas of Grand Traverse Bay.																				
		9.	Eshquagonabee's Band	Michigan ...	24	127	49	20	27	28	3	.....	.....	.....	.....	.....	5	...	2				
		10.	Akosa's Band	Michigan ...	40	166	44	30	40	42	10	.....	.....	.....	.....	1	5	1	4	4			
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan ...	19	81	22	19	17	21	2	.....	.....	.....	.....	.....	...	1	1	...	...	...	1
		12.	Band at Nagondagon	Michigan ...	15	46	5	8	16	14	3												
		13.	Band at Muhzheguning	Michigan ...	18	70	20	14	16	19	1	.....	.....	.....	.....	.....	...	...	...	2			
			Chippewas of Michillimackinac.																				
		14.	Indians of the Beaver Islands	Michigan ...	7	35	12	9	7	7	.....	.....	.....	.....	.....	.....	1	3					
		15.	Manistee River, north	Michigan ...	13	73	23	21	12	16	1	.....	.....	.....	.....	.....	1	...	...	1			
		16.	Shabegoshing, or Carp River	Michigan ...	13	75	28	23	11	13	.....	.....	.....	.....	.....	1	...	3	1				
		17.	Ance's Band, Oak Point	Michigan ...	23	92	24	25	21	21	1	.....	.....	1	1	4	11	3					
		18.	Point St. Ignace	Michigan ...	8	42	9	18	7	7	1												
		19.	Chenos, Huron, north	Michigan ...	15	45	16	5	11	13	.....	.....	.....	.....	.....	.....	1	...	1				
			Straits of St. Mary, &c.																				
		20.	Drummond Island Band	Michigan ...	20	103	25	21	23	32	2	.....	.....	.....	.....	1	1	4	2	...	1		
		21.	Primary Band of Sault Ste. Marie	Michigan ...	58	195	31	29	54	78	3	.....	.....	.....	.....	.....	2	...	4	1	1		
		22.	Waishkee's Bay, foot of Lake Superior	Michigan ...	25	66	14	11	19	22	.....	.....	.....	.....	.....	.....	...	1	3	2			
		23.	Tacquimenon River	Michigan ...	12	51	9	9	15	18	.....	.....	.....	1	.....	.....	1	...	1				
		24.	Grand Island of Lake Superior	Michigan ...	13	57	9	7	21	20	.....	.....	.....	.....	.....	.....	1	...	...	...	1		
					734	2028	436	391	400	460	39	1	3	14	12	11	33	23	26	19	8		1

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.
			Detroit Chippewas																		
		1.	Chippewas of Swan Creek and Black River..	Michigan ...	...	32	32	.....	.....	.....	...	...	.....	...	...	.....	.....	22	20		
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	...	.....	10	.....	.....	.....	...	...	.....	...	...	.....	.....	1	1	5	
			Saganaws.																		
		3.	Saganaws of Pewanuganink	Michigan ...	...	.....	.....	.....	.....	.....	...	...	.....	...	...	.....	.....	17	18		
		4.	Saganaws of Natoway's Band	Michigan ...																	
		5.	Band of Ogakaning	Michigan ...	...	.....	.....	.....	.....	.....	...	...	.....	...	...	.....	.....	20	18		
		6.	Atawa's Band, Saganaws	Michigan ...																	
		7.	Band of Wabeseepenukaning	Michigan ...																	
			Lake Huron, South.																		
		8.	Chippewas of Thunder Bay	Michigan ...	2	14	14														
			Chippewas of Grand Traverse Bay.																		
		9.	Eshquagonabee's Band	Michigan ...	...	26	37	.....	.....	2	1	...	.....	...	1	1	.....	37	10	5	
		10.	Akosa's Band	Michigan ...	...	11	8	.....	.....	.....	...	...	.....	...	1	1					
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan ...																	
		12.	Band at Nagondagon	Michigan ...																	
		13.	Band at Muhzheguning	Michigan ...																	
			Chippewas of Michillimackinac.																		
		14.	Indians of the Beaver Islands	Michigan ...	...	.....	.....	.....	.....	.....	...	...	.....	...	4						
		15.	Manistee River, north	Michigan ...	...	.....	17	.....	.....	.....	2	...	.....	...	1						
		16.	Shabegoshing, or Carp River	Michigan ...	...	10	3														
		17.	Ance's Band, Oak Point	Michigan ...	...	10	13	1	1	.....	1	...	.....	...	...	.....	.....	.....	.....	1	
		18.	Point St. Ignace	Michigan ...	...	.....	8														
		19.	Chenos, Huron, north	Michigan ...	...	10	5														
			Straits of St. Mary, &c.																		
		20.	Drummond Island Band	Michigan ...	1	18															
		21.	Primary Band of Sault Ste. Marie	Michigan ...	2	11	.....	.....	.....	.....	...	...	.....	...	...	.....	.....	2	1	5	
		22.	Waishkee's Bay, foot of Lake Superior	Michigan ...	...	6	10	1	.....	.....	...	...	.....	...	...	.....	.....	14	10	24	
		23.	Tacquimenon River	Michigan ...	...	12	.....	.....	.....	.....	...	...	.....	...	...	.....	.....	.....	.....	10	
		24.	Grand Island of Lake Superior	Michigan ...	1	21	.....	.....	.....	.....	...	...	.....	...	...	.....	.....	2	4	7	
					6	181	157	2	1	2	4				7	2		115	82	57	

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Manteamakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.
			Detroit Chippewas.																		
		1.	Chippewas of Swan Creek and Black River..	Michigan ...	...	...	...	11	...	.....	.....	...	...	...	...	.....	.....	80	1,000	45	150
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	25	500	...	10
			Saganaws.																		
		3.	Saganaws of Pewanuganink.....	Michigan ...	...	...	...	...	...	.....	.....	16	...	...	18	32	.....	.....	766	...	85
		4.	Saganaws of Natoway's Band.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	1	750	45	100	...	55
		5.	Band of Ogakaning.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	.....	150		
		6.	Atawa's Band, Saganaws	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	30	300	...	350
		7.	Band of Wabeseepenukaning.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	30	228		
			Lake Huron, South.																		
		8.	Chippewas of Thunder Bay.....	Michigan ...	...	...	...	2	...	.....	.....	...	...	...	...	.....	.....	40	200	...	700
			Chippewas of Grand Traverse Bay.																		
		9.	Eshquagonabee's Band	Michigan ...	...	22	27	10	2	9	5	13	...	...	...	2	101	150	539	...	848
		10.	Akosa's Band	Michigan ...	...	...	...	6	...	.....	.....	...	...	...	6	6	204	350	909	...	1,160
1.	CHIPPEWAS.	11.	Kagwatosa's Band.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	2	102	100	619	...	871
		12.	Band at Nagondagon	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	.....	79	...	59
		13.	Band at Muhzheguning.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	.....	301	...	123
			Chippewas of Michillimackinac.																		
		14.	Indians of the Beaver Islands	Michigan ...	...	...	...	14	2	.....	.....	...	...	...	...	.....	.....	120	810	...	1,000
		15.	Manistee River, north	Michigan ...	...	8	9	20	12	.....	.....	...	...	...	...	.....	.....	230	6,000	...	890
		16.	Shabegoshing, or Carp River.....	Michigan ...																	
		17.	Ance's Band, Oak Point.....	Michigan ...	...	...	...	2	1												
		18.	Point St. Ignace.....	Michigan ...	...	...	...	3	2	.....	.....	...	...	...	...	.....	.....	.....	.....	...	800
		19.	Chenos, Huron, north.....	Michigan ...	...	...	...	1	...	.....	.....	...	...	...	...	.....	.....	.....	.....	...	150
			Straits of St. Mary, &c.																		
		20.	Drummond Island Band.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	25	20	200	...	200
		21.	Primary Band of Sault Ste. Marie	Michigan ...	...	2	1	...	...	.....	.....	1	...	...	...	35	100	10	.....	...	2,000
		22.	Waishkee's Bay, foot of Lake Superior.....	Michigan ...	...	14	10	2	2	.....	.....	4	...	...	...	.....	.....	8	.....	...	1,700
		23.	Tacquimenon River.....	Michigan ...	...	...	...	...	...	.....	.....	...	...	...	...	.....	140	4	.....	...	1,500
		24.	Grand Island of Lake Superior.....	Michigan ...	...	4	2	1	2	.....	.....	...	...	...	...	.....	61	5	.....	...	600
						50	49	72	23	9	5	34			24	78	1483	1247	13,701	45	13,251

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	54 Number of Bushels of Oats raised.	55 Number of Bushels of Beans raised.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen.	73 Number of Milch Cows.
			Detroit Chippewas.																						
		1.	Chippewas of Swan Creek and Black River	Michigan	...	.....	...	...	.....	...	...	...	...	.....	1,100	.....	...	...	...	.....	68				
		2.	Chippewas of Swan Cr. and Black R., west	Ind. Ter. W.	...	15	...	...	50	...	...	...	150	276	60	.....	70	...	4	$395	15	...	4	4
			Saganaws.																						
		3.	Saganaws of Pewanuganink	Michigan	...	2	...	...	.....	...	...	...	...	.....	2,315	.....	...	200	...	.....	16	...	2	
		4.	Saganaws of Natoway's Band	Michigan	...	10	...	...	.....	...	...	...	...	12	2,400	.....	...	...	4	$223	120	...	2	4
		5.	Band of Ogakaning	Michigan	...	.....	...	...	.....	...	...	...	...	.....	1,000	.....	...	...	...	.....	4	...	4	2
		6.	Atawa's Band, Saganaws	Michigan	...	.....	...	...	.....	...	...	...	...	.....	1,200	.....	...	...	...	.....	...	...	4	4
		7.	Band of Wabeseepenukaning	Michigan	...	.....	...	...	.....	...	...	...	...	.....	3,500	.....	...	...	...	.....	5	...	2	1
			Lake Huron, South.																						
		8.	Chippewas of Thunder Bay	Michigan	...	.....	...	...	.....	...	...	...	...	.....	8,000	.....	...	...	...	.....	3				
			Chippewas of Grand Traverse Bay.																						
		9.	Eshquagonabee's Band	Michigan	...	30	...	...	.....	...	...	...	1	3,000	8,800	.....	...	...	...	$80	13			
		10.	Akosa's Band	Michigan	...	19	...	...	.....	...	...	...	30	2,800	15,580	.....	...	...	...	$655	12			
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan	...	19	...	...	.....	...	...	...	...	3,900	15,050	.....	...	...	...	$100	17			
		12.	Band at Nagondagon	Michigan	...	9	...	...	.....	...	...	...	...	600	2,150									
		13.	Band at Muhzheguning	Michigan	...	.....	...	...	.....	...	...	...	...	1,250	.....	.....	...	...	...	.....	4			
			Chippewas of Michillimackinac.																						
		14.	Indians of the Beaver Islands	Michigan	...	80	...	...	20	...	...	...	...	100	20,000	.....	...	...	...	$300				
		15.	Manistee River, north	Michigan	...	50	5	...	50	...	...	...	...	300	23,000	.....	...	...	...	$300	...	...	...	2
		16.	Shabegoshing, or Carp River	Michigan	...	.....	...	...	.....	...	...	...	...	.....	.....	3500								
		17.	Ance's Band, Oak Point	Michigan	...	.....	...	...	.....	...	...	...	...	.....	16,000	.....	...	...	...	.....	7	...	...	1
		18.	Point St. Ignace	Michigan	20	.....	...	...	100	...	...	...	...	.....	1,300	.....	...	...	...	.....	2			
		19.	Chenos, Huron, north	Michigan	...	.....	...	...	.....	...	...	...	...	.....	12,000									
			Straits of St. Mary, &c.																						
		20.	Drummond Island Band	Michigan	...	.....	...	...	250	...	...	...	...	500	7,000	.....	...	...	...	$12				
		21.	Primary Band of Sault Ste. Marie	Michigan	...	.....	...	...	.....	...	...	...	...	300	17,000	.....	...	...	1	$27	1	...	2	1
		22.	Waishkee's Bay, foot of Lake Superior	Michigan	...	.....	...	...	.....	...	...	...	...	.....	7,600	.....	...	...	3	$75	...	...	3	9
		23.	Tacquimenon River	Michigan	...	.....	...	...	300	...	...	...	...	200	6,000	.....	...	...	...	$71	2	...	3	1
		24.	Grand Island of Lake Superior	Michigan	...	.....	...	...	.....	...	...	...	...	.....	3,500	.....	...	...	...	$25				
					20	234	5		770				181	13,238	174,555	3500	70	200	12	$2263	289		26	29

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	74 Other Neat Cattle.	75 Number of Sheep.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Plus" or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.
			Detroit Chippewas.																			
1.	CHIPPEWAS.	1.	Chippewas of Swan Creek and Black River	Michigan	...	...	...	51														
		2.	Chippewas of Swan Cr. and Black R., west	Ind. Ter. W.	7	...	...	15	5	...	3	...	14	1	12	...	....	14	$121	$40	80	$6.00
			Saganaws.																			
		3.	Saganaws of Pewanuganink	Michigan	1	...	...	18	1	...	4	...	25	...	55	1	....	8	$11			
		4.	Saganaws of Natoway's Band	Michigan	13	24	24	10	4	...	4	...	50	...	50	...	....	43	$35	.....	410	$560.00
		5.	Band of Ogakaning	Michigan																		
		6.	Atawa's Band, Saganaws	Michigan	1																	
		7.	Band of Wabeseepenukaning	Michigan																		
			Lake Huron, South.																			
		8.	Chippewas of Thunder Bay	Michigan	...	...	...	...	...	...	...	...	40	15	50	...	....	3	.....	$60	.....	$43.00
			Chippewas of Grand Traverse Bay.																			
		9.	Eshquagonabee's Band	Michigan	...	...	...	60	...	...	...	...	51	9	63	...	....	11	.....	.....	.....	$25.00
		10.	Akosa's Band	Michigan																		
		11.	Kagwatosa's Band	Michigan																		
		12.	Band at Nagondagon	Michigan																		
		13.	Band at Muhzheguning	Michigan																		
			Chippewas of Michillimackinac.																			
		14.	Indians of the Beaver Islands	Michigan	...	...	...	30	...	...	...	...	50	1	200	...	....	....	$800			
		15.	*Manistee River, north*	Michigan	...	...	...	80	...	...	...	...	...	2	240	...	....	....	$700			
		16.	Shabegoshing, or Carp River	Michigan	...	...	...	...	...	...	...	...	6	...	70	...	....	....	.....	$600	.....	$40.00
		17.	Ance's Band, Oak Point	Michigan	...	...	...	...	...	...	...	...	...	...	70	...	....	10	.....	$500	....	$13.00
		18.	Point St. Ignace	Michigan	...	...	...	...	...	...	...	...	10	3	26	1	....	2				
		19.	Chenos, Huron, north	Michigan	...	...	...	...	...	...	...	...	30	...	45	....	....	....	.....	$250	.....	$25.00
			Straits of St. Mary, &c.																			
		20.	Drammond Island Band	Michigan	...	...	...	2	...	...	...	...	30	...	50	....	....	....	$70	$2	680	$75.50
		21.	Primary Band of Sault Ste. Marie	Michigan	2	...	...	...	...	...	...	...	150	12	200	....	....	....	$400	$2	300	$60.00
		22.	Waishkee's Bay, foot of Lake Superior	Michigan	...	...	...	...	...	...	...	...	35	...	54	....	....	....	$60	$2	144	$46.00
		23.	Tacquimenon River	Michigan	...	...	...	...	...	...	...	...	100	....	100	....	....	....	$120	$2	200	$33.00
		24.	Grand Island of Lake Superior	Michigan	...	...	...	...	...	...	...	...	30	...	47	....	....	....	$5	$2	100	$10.00
					24	24	24	266	10		11		621	43	1332	2		91	$2,322	$1,460	1914	$936.50

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	92 Amount of Cash Annuity per Capita received from the Government.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.	105 Number of the native Priesthood who officiate as Public Prophets.
			Detroit Chippewas.															
		1.	Chippewas of Swan Creek and Black River..	Michigan ...	.....	81	.....	.....	.....	.....	.....	.....	.....	2				
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	$13.00	.....	.....	5	.....	.....	$75.50	.....	1	1	1			
			Saganaws.															
		3.	Saganaws of Pewanuganink.....	Michigan ...	.....	29	32	.....	.....	2								
		4.	Saganaws of Natoway's Band.....	Michigan ...	$2.04	8	14	80	32	1								
		5.	Band of Ogakaning.....	Michigan ...	.....	51												
		6.	Atawa's Band, Saganaws	Michigan ...	.....	32												
		7.	Band of Wabeseepenukaning.....	Michigan ...	.....	30	.....	45										
			Lake Huron, South.															
		8.	Chippewas of Thunder Bay.....	Michigan ...	.....	6	4	67										
			Chippewas of Grand Traverse Bay.															
		9.	Eshquagonabee's Band	Michigan ...	.....	32	40	54	.....	.....	.....	.....	1	1	1			
		10.	Akosa's Band	Michigan ...	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1			
1.	CHIPPEWAS.	11.	Kagwatosa's Band.....	Michigan ...	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1			
		12.	Band at Nagondagon	Michigan ...	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1			
		13.	Band at Muhzheguning.....	Michigan ...	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1			
			Chippewas of Michillimackinac.															
		14.	Indians of the Beaver Islands	Michigan ...	.....	.....	.....	18	7	1	.....	.....	1	1	1	...	7	
		15.	Manistee River, north	Michigan ...	.....	.....	.....	.....	72	4	.....	.....	1	1	1	...	20	
		16.	Shabegoshing, or Carp River	Michigan ...														
		17.	Ance's Band, Oak Point.....	Michigan ...	.....	.....	.....	.....	.....	1								
		18.	Point St. Ignace.....	Michigan ...	.....	.....	.....	.....	.....	1								
		19.	Chenos, Huron, north.....	Michigan ...														
			Straits of St. Mary, &c.															
		20.	Drummond Island Band.....	Michigan ...	$4.00	9	13	79	.....	.....	$91.50	.....	.....	1	1	2	16	
		21.	Primary Band of Sault Ste. Marie	Michigan ...	$4.00	50	70	70	2	.....	$91.00	.....	.....	1	1	2	70	
		22.	Waishkee's Bay, foot of Lake Superior.....	Michigan ...	$4.00	12	14	42	21	.....	$121.00	.....	.....	1	1	2	16	
		23.	Tacquimenon River	Michigan ...	$4.00	35	14	2	49	.....	$108.00	.....	.....	1	1	2	10	
		24.	Grand Island of Lake Superior.....	Michigan ...	$4.00	25	25	7	50	.....	$39.00	.....	.....	1	1	2	15	
						400	226	469	233	10	$526.00		8	15	12	10	154	

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and all other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents.	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.	121 Number of Farmers and Assistants.
			Detroit Chippewas.																	
		1.	Chippewas of Swan Creek and Black River..	Michigan ...																
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	$200															
			Saganaws.																	
		3.	Saganaws of Pewanuganink	Michigan ...																
		4.	Saganaws of Natoway's Band	Michigan ...																
		5.	Band of Ogakaning	Michigan ...																
		6.	Atawa's Band, Saganaws	Michigan ...																
		7.	Band of Wabeseepenukaning	Michigan ...																
			Lake Huron, South.																	
		8.	Chippewas of Thunder Bay	Michigan ...																
			Chippewas of Grand Traverse Bay.																	
		9.	Eshquagonabee's Band	Michigan ...																
		10.	Akosa's Band	Michigan ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	1		
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan ...																
		12.	Band at Nagondagon	Michigan ...																
		13.	Band at Muhzheguning	Michigan ...																
			Chippewas of Michillimackinac.																	
		14.	Indians of the Beaver Islands	Michigan ...																
		15.	Manistee River, north	Michigan ...																
		16.	Shabegoshing, or Carp River	Michigan ...																
		17.	Ance's Band, Oak Point	Michigan ...																
		18.	Point St. Ignace	Michigan ...																
		19.	Chenos, Huron, north	Michigan ...																
			Straits of St. Mary, &c.																	
		20.	Drummond Island Band	Michigan ...																
		21.	Primary Band of Sault Ste. Marie	Michigan ...																
		22.	Waishkee's Bay, foot of Lake Superior	Michigan ...	.....	.....	.....	.....	.....	$5000	.....	$400	$50	$3710	...	1	...	1	4	1
		23.	Tacquimenon River	Michigan ...																
		24.	Grand Island of Lake Superior	Michigan ...																
					$200					$5000		$400	$50	$3710		1		2	4	1

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.
1.	CHIPPEWAS.		*Detroit Chippewas.*																				
		1.	Chippewas of Swan Creek and Black River	Michigan	...	...	2	.....	.....	...	1	1	1	$1000									
		2.	Chippewas of Swan Cr. and Black R., west	Ind. Ter. W.																			
			Saganaws.																				
		3.	Saganaws of Pewanuganink	Michigan																			
		4.	Saganaws of Natoway's Band	Michigan																			
		5.	Band of Ogakaning	Michigan																			
		6.	Atawa's Band, Saganaws	Michigan	...	...	...	.....	.....	...	...	1											
		7.	Band of Wabeseepenukaning	Michigan																			
			Lake Huron, South.																				
		8.	Chippewas of Thunder Bay	Michigan																			
			Chippewas of Grand Traverse Bay.																				
		9.	Eshquagonabee's Band	Michigan																			
		10.	Akosa's Band	Michigan	...	...	1	1															
		11.	Kagwatosa's Band	Michigan																			
		12.	Band at Nagondagon	Michigan																			
		13.	Band at Muhzheguning	Michigan																			
			Chippewas of Michillimackinac.																				
		14.	Indians of the Beaver Islands	Michigan																			
		15.	Manistee River, north	Michigan	...	...	1																
		16.	Shabegoshing, or Carp River	Michigan																			
		17.	Ance's Band, Oak Point	Michigan																			
		18.	Point St. Ignace	Michigan																			
		19.	Chenos, Huron, north	Michigan																			
			Straits of St. Mary, &c.																				
		20.	Drummond Island Band	Michigan																			
		21.	Primary Band of Sault Ste. Marie	Michigan																			
		22.	Waishkee's Bay, foot of Lake Superior	Michigan	1	...	...	3	.....	...	4	4	4	$6000									
		23.	Tacquimenon River	Michigan																			
		24.	Grand Island of Lake Superior	Michigan																			
					1		4	4			5	6	5	$7000									

CENSUS RETURNS OF THE INDIAN TRIBES OF THE UNITED STATES.

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *Engagés* employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.
			Detroit Chippewas.																		
		1.	Chippewas of Swan Creek and Black River..	Michigan ...																	
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	...	...	...	...	6	.....	.....	.....	.....	.....	.....	$40	5	10	...	.....	5
			Saganaws.																		
		3.	Saganaws of Pewanuganink	Michigan ...																	
		4.	Saganaws of Natoway's Band	Michigan ...																	
		5.	Band of Ogakaning	Michigan ...																	
		6.	Atawa's Band, Saganaws	Michigan ...																	
		7.	Band of Wabeseepenukaning	Michigan ...																	
			Lake Huron, South.																		
		8.	Chippewas of Thunder Bay	Michigan ...																	
			Chippewas of Grand Traverse Bay.																		
		9.	Eshquagonabee's Band	Michigan ...																	
		10.	Akosa's Band	Michigan ...																	
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan ...																	
		12.	Band at Nagondagon	Michigan ...																	
		13.	Band at Muhzheguning	Michigan ...																	
			Chippewas of Michillimackinac.																		
		14.	Indians of the Beaver Islands	Michigan ...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	35			
		15.	Manistee River, north	Michigan ...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	72	...	.....	12
		16.	Shabegoshing, or Carp River	Michigan ...																	
		17.	Ance's Band, Oak Point	Michigan ...																	
		18.	Point St. Ignace	Michigan ...																	
		19.	Chenos, Huron, north	Michigan ...																	
			Straits of St. Mary, &c.																		
		20.	Drummond Island Band	Michigan ...	...	...	7	.....	200	.....	.....	.....	.....	.....	.....	$1360	18	...	8	1	
		21.	Primary Band of Sault Ste. Marie	Michigan ...	...	...	2	.....	500	.....	.....	.....	.....	.....	.....	$600	81	...	...	2	
		22.	Waishkee's Bay, foot of Lake Superior	Michigan ...	...	...	...	.....	211	.....	.....	5	.....	.....	.....	$288	22	...	...	.....	1
		23.	Tacquimenon River	Michigan ...	...	...	2	.....	150	.....	.....	.....	.....	.....	.....	$400	24	...	1		
		24.	Grand Island of Lake Superior	Michigan ...	...	...	1	.....	600	.....	.....	.....	.....	.....	.....	$200	36	...	4		
							12		1667							$2888	186	117	13	3	78

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	75 Number of Sheep.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Plus" or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita received from the Government.	93 Number of Male Professors of the Christian Religion.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.	367	....	4,782	...	...	....	...	...	...	...	...	46							
		2.	Division of James Wolf.	W. of Arkansas.	93	...	3,794	...	....	...	...	...	...	...	...	22							
		3.	Division of Winchester Colbert.....	W. of Arkansas.	279	...	5,112	...	...	...	...	...	...	...	...	49							
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	78	...	2,682	...	...	...	...	...	...	...	...	20							
		5.	Division of William Newberry.....	W. of Arkansas.	99	...	3,390	...	...	...	...	...	...	...	...	16							
		6.	Division of Captain Jerry	W. of Arkansas.	232	...	4,382	...	...	...	...	...	...	...	...	40							
2.	CHEROKEES..	7.	Catugajay Creek, Macon County.....	North Carolina..																			
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																			
		9.	Bird and Pretty Woman Towns.....	North Carolina..																			
		10.	Cherokee and Buffalo...	North Carolina..																			
		11.	Neighborhood of Murphy	North Carolina..																			
					1148		24,142									193							

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	38 Number of Male Sabbath-School Scholars.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Mantuamakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.	54 Number of Bushels of Oats raised.
1.	CHICKASAWS	1.	Division of Slone Love..	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	...	.....	.....	...	77,140	2,317	19,705	5,880
		2.	Division of James Wolf.	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	...	.....	.....	...	40,400	200	10,537	260
		3.	Division of Winchester Colbert.....	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	...	.....	.....	...	40,320	320	5,555	292
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	...	.....	.....	...	34,600	300	11,586	200
		5.	Division of William Newberry.....	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	..	.....	.....	...	28,080	200	5,053	100
		6.	Division of Captain Jerry	W. of Arkansas.	...	...	...	...	.....	.....	...	...	...	...	.....	.....	...	44,751	915	11,481	7,670
2.	CHEROKEES..	7.	Catugajay Creek, Macon County.....	North Carolina..																	
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																	
		9.	Bird and Pretty Woman Towns.....	North Carolina..																	
		10.	Cherokee and Buffalo...	North Carolina..																	
		11.	Neighborhood of Murphy	North Carolina..																	
																		265,351	4,252	63,917	14,402

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	55 Number of Bushels of Beans raised.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen.	73 Number of Milch Cows.	74 Other Neat Cattle.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.	...	...	...	...	....	...	883	...	...	...	...	...	...	...	.....	1089	...	...	...	1,931
		2.	Division of James Wolf.	W. of Arkansas.	...	...	...	....	....	...	.....	...	...	...	...	...	...	...	.....	1437	...	...	...	3,253
		3.	Division of Winchester Colbert.....	W. of Arkansas.	...	...	...	...	...	...	.....	...	...	...	...	...	...	...	.....	906	...	...	...	2,502
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	...	...	...	...	...	...	.....	...	...	...	...	...	....	...	.....	707	...	...	...	1,835
		5.	Division of William Newberry.....	W. of Arkansas.	...	...	...	....	...	...	.....	...	...	...	...	...	....	...	.....	735	...	...	...	2,532
		6.	Division of Captain Jerry	W. of Arkansas.	...	...	...	....	...	...	326	...	...	...	...	...	....	...	.....	915	...	...	...	2,735
2.	CHEROKEES..	7.	Catugajay Creek, Macon County	North Carolina..																				
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																				
		9.	Bird and Pretty Woman Towns.....	North Carolina..																				
		10.	Cherokee and Buffalo ...	North Carolina..																				
		11.	Neighborhood of Murphy	North Carolina..																				
											1209									5789				14,788

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 16.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 16 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.	204	702	175	169	161	197	.....		162									
		2.	Division of James Wolf.	W. of Arkansas.	204	789	204	186	188	211	.....		50									
		3.	Division of Winchester Colbert.....	W. of Arkansas.	209	700	162	146	176	216	.....		156									
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	145	575	137	121	168	149	.....		57			.....	.....	.....	...	...	7	5
		5.	Division of William Newberry.....	W. of Arkansas.	200	748	176	178	201	193	.....		44			.....	.....	.....	...	...	...	1
		6.	Division of Captain Jerry	W. of Arkansas.	204	746	175	160	195	216	.....		158									
2.	CHEROKEES..	7.	Catugajay Creek, Macon County.....	North Carolina..	9	13	.....	.....	7	5	1											
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..	158	326	27	20	114	126	39	.....				.....	.....	.....	2	5		
		9.	Bird and Pretty Woman Towns.....	North Carolina..	79	173	20	11	65	60	17	.....				.....	.....	.....	3	5		
		10.	Cherokee and Buffalo...	North Carolina..	80	153	17	9	53	57	17	.....				.....	.....	.....	3	8		
		11.	Neighborhood of Murphy	North Carolina..	43	90	11	10	28	35	6	.....				.....	.....	.....	...	1		
					1532	5015	1103	1010	1357	1465	80		627						8	19	7	6

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	19 Number of Idiots.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.	37 Number of Females who are engaged as Teachers.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.		•							•				•						
		2.	Division of James Wolf.	W. of Arkansas.	•																		
		3.	Division of Winchester Colbert.....	W. of Arkansas.																			
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	•													•			•		
		5.	Division of William Newberry.....	W. of Arkansas.																			
		6.	Division of Captain Jerry	W. of Arkansas.		•																	
2.	CHEROKEES..	7.	Catugajay Creek, Macon County.....	North Carolina..																			
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																			
		9.	Bird and Pretty Woman Towns.....	North Carolina..														•					
		10.	Cherokee and Buffalo...	North Carolina..																			
		11.	Neighborhood of Murphy	North Carolina..																			

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *Engagés* employed by the Principals.	151 Aggregate Number of Skins, reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.
1.	OMAHAS	1.	Omahas	S. of the Mo.	....	....	....	....	.....	....	2	.....	3	.....	.....	.....	300	...	6	6	
2.	OTOES	2.	Otoes	S. of the Mo.	....	....	....	....	.....	....	2	.....	3	.....	.....	.....	300	...	6	6	
3.	WINNEBAGOES.	3.	Little Hills' Band	W. of the Miss.																	
		4.	Little Decorrie's Band	W. of the Miss.																	
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.																	
		6.	Ho-pee-kaw's Band	W. of the Miss.																	
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.																	
		8.	Baptiste's Band	W. of the Miss.																	
		9.	Wee-noo-shik's Band	W. of the Miss.																	
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.																	
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.																	
		12.	Taw-nu-nuk's Band	W. of the Miss.																	
		13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.																	
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.																	
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.																	
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.																	
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.																	
		18.	Good Thunder's Band	W. of the Miss.																	
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.																	
		20.	Black Hawk's Band	W. of the Miss.																	
		21.	Little Thunder's Band	W. of the Miss.																	
		22.	Naw-key-ku-kaw's Band	W. of the Miss.																	
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.																	
4.	IOWAS	24.	Division not designated	W. of the Mo.	....	....	....	....	.....	....	1	.....	2	.....	.....	.....	150	100	...	.....	40
5.	DACOTAS OR SIOUX	25.	Red Wing's Village	Minnesota Ter.																	
		26.	Little Crow's Village	Minnesota Ter.																	
		27.	Lake Calhoun Band	Minnesota Ter.	...	....	....	....	500	...	8	.....	6	12	.....	$60,000	500	...	300	300	
		28.	Goodroad's Band	Minnesota Ter.																	
		29.	Black Dog's Band	Minnesota Ter.																	
		30.	Little Six's Band	Minnesota Ter.	....	....	....	....	500	....	10	.....	10	.....	.....	$60,000	500	...	...	300	
		31.	Wa-ba-shaw's Band	Minnesota Ter.																	
6.	QUAPAWS	32.	Neosho Agency	Missouri	....	....	....	....	.....	....	1	.....	2	.....	.....	.....	120	81	...	.....	23
									1000		24		26	12		$120,000	1870	181	312	612	63

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons living in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children by each Female, being those between 16 and 60 Years of Age.	171 Value of Real Work.	172 Amount received for Premises leased.
1.	OMAHAS..	1.	Omahas.....	S. of the Mo....	9	21	.....	.....	.....	1									
2.	OTOES.....	2.	Otoes.....	S. of the Mo....	.....	8													
3.	WINNEBAGOES.	3.	Little Hills' Band.....	W. of the Miss.															
		4.	Little Decorrie's Band.....	W. of the Miss.															
		5.	Maw-kuh-soonch-kaw's Band...	W. of the Miss.															
		6.	Ho-pee-kaw's Band.....	W. of the Miss.															
		7.	Waw-kon-haw-kaw's Band.....	W. of the Miss.															
		8.	Baptiste's Band.....	W. of the Miss.															
		9.	Wee-noo-shik's Band.....	W. of the Miss.															
		10.	Con-a-ha-ta-kaw's Band.....	W. of the Miss.															
		11.	Paw-sed-ech-kaw's Band.....	W. of the Miss.															
		12.	Taw-nu-nuk's Band.....	W. of the Miss.															
		13.	Ah-hoo-zeeb-kaw's Band.....	W. of the Miss.															
		14.	Is-chaw-go-baw-kaw's Band.....	W. of the Miss.															
		15.	Watch-ha-ta-kaw's Band.....	W. of the Miss.															
		16.	Waw-maw-noo-kaw-kaw's Band.	W. of the Miss.															
		17.	Waw-kon-chaw-zu-kaw's Band..	W. of the Miss.															
		18.	Good Thunder's Band.....	W. of the Miss.															
		19.	Koog-ay-ray-kaw's Band.....	W. of the Miss.															
		20.	Black Hawk's Band.....	W. of the Miss.															
		21.	Little Thunder's Band.....	W. of the Miss.															
		22.	Naw-key-ku-kaw's Band.....	W. of the Miss.															
		23.	O-chin-chin-nu-kaw's Band.....	W. of the Miss.															
4.	IOWAS.....	24.	Division not designated.....	W. of the Mo...	25	.....	480	150	25	.....	3	150	744						
5.	DACOTAS OR SIOUX	25.	Red Wing's Village.....	Minnesota Ter.	.....	.....	.....	.....	.....	.....	.....	50	2000						
		26.	Little Crow's Village.....	Minnesota Ter.															
		27.	Lake Calhoun Band.....	Minnesota Ter.															
		28.	Goodroad's Band.....	Minnesota Ter.															
		29.	Black Dog's Band.....	Minnesota Ter.															
		30.	Little Six's Band.....	Minnesota Ter.	.....	.....	10	300	.....	1	.....	$\frac{1}{6}$	All.						
		31.	Wa-ba-shaw's Band.....	Minnesota Ter.															
6.	QUAPAWS	32.	Neosho Agency.....	Missouri.....	23	.....	200	71	.....	.....	.....	All.	277						
					57	29	690	521	25	2	3								

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and all other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.
1.	OMAHAS..	1.	Omahas.....	S. of the Mo....	.....	.....	...	.....	.....	$306.08	$68.47	$7,012.82	1	...	...	1	2
2.	OTOES.....	2.	Otoes.....	S. of the Mo....	.....	.....	...	$500	$27.75	$226.08	$68.47	$7,012.82	1	...	...	1	1
3.	WINNEBAGOES.	3.	Little Hills' Band.....	W. of the Miss.													
		4.	Little Decorrie's Band.....	W. of the Miss.													
		5.	Maw-kuh-soonch-kaw's Band ...	W. of the Miss.													
		6.	Ho-pee-kaw's Band.....	W. of the Miss.													
		7.	Waw-kon-haw-kaw's Band.....	W. of the Miss.													
		8.	Baptiste's Band.....	W. of the Miss.													
		9.	Wee-noo-shik's Band.....	W. of the Miss.													
		10.	Con-a-ha-ta-kaw's Band.....	W. of the Miss.													
		11.	Paw-sed-ech-kaw's Band.....	W. of the Miss.													
		12.	Taw-nu-nuk's Band.....	W. of the Miss.													
		13.	Ah-hoo-zeeb-kaw's Band.....	W. of the Miss.													
		14.	Is-chaw-go-baw-kaw's Band.....	W. of the Miss.													
		15.	Watch-ha-ta-kaw's Band.....	W. of the Miss.													
		16.	Waw-maw-noo-kaw-kaw's Band.	W. of the Miss.													
		17.	Waw-kon-chaw-zu-kaw's Band..	W. of the Miss.													
		18.	Good Thunder's Band.....	W. of the Miss.													
		19.	Koog-ay-ray-kaw's Band.....	W. of the Miss.													
		20.	Black Hawk's Band.....	W. of the Miss.													
		21.	Little Thunder's Band.....	W. of the Miss.													
		22.	Naw-key-ku-kaw's Band.....	W. of the Miss.													
		23.	O-chin-chin-nu-kaw's Band.....	W. of the Miss.													
4.	IOWAS.....	24.	Division not designated.....	W. of the Mo...	.....	.....	...	.....	.....	.....	$20.00	.....	...	1	...	1	
5.	DACOTAS OR SIOUX	25.	Red Wing's Village.....	Minnesota Ter.													
		26.	Little Crow's Village.....	Minnesota Ter.													
		27.	Lake Calhoun Band.....	Minnesota Ter.	$5,500	$100	...	$5,000	$8,250.00	$700.00	$200.00	$5,450.00	...	1	...	1	4
		28.	Goodroad's Band.....	Minnesota Ter.													
		29.	Black Dog's Band.....	Minnesota Ter.													
		30.	Little Six's Band.....	Minnesota Ter.	$5,500	$100	...	$5,000	$8,250.00	$700.00	$200.00	$5,450.00	...	1	...	1	4
		31.	Wa-ba-shaw's Band.....	Minnesota Ter.													
6.	QUAPAWS	32.	Neosho Agency.....	Missouri.....	.....	.....	...	$1,000	.....	$171.25	$100.00	$3,232.73	...	1	...	1	2
					$11,000	$200		$11,500	$16,527.75	$2103.41	$656.94	$28,158.37	2	4		6	13

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	121 Number of Farmers and Assistants.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.
1.	OMAHAS	1.	Omahas	S. of the Mo...	...	...	...	...	.....	.....	...	.....	1	....	$1000									
2.	OTOES	2.	Otoes	S. of the Mo...	...	...	...	...	.....	6	...	1	....	....	$1000									
		3.	Little Hills' Band	W. of the Miss.																				
		4.	Little Decorrie's Band	W. of the Miss.																				
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.																				
		6.	Ho-pee-kaw's Band	W. of the Miss.																				
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.																				
		8.	Baptiste's Band	W. of the Miss.																				
		9.	Wee-noo-shik's Band	W. of the Miss.																				
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.																				
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.																				
		12.	Taw-nu-nuk's Band	W. of the Miss.																				
3.	WINNEBAGOES	13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.																				
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.																				
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.																				
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.																				
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.																				
		18.	Good Thunder's Band	W. of the Miss.																				
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.																				
		20.	Black Hawk's Band	W. of the Miss.																				
		21.	Little Thunder's Band	W. of the Miss.																				
		22.	Naw-key-ku-kaw's Band	W. of the Miss.																				
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.																				
4.	IOWAS	24.	Division not designated	W. of the Mo...	...	...	...	...	2	2	1	1	1	1										
		25.	Red Wing's Village	Minnesota Ter.																				
		26.	Little Crow's Village	Minnesota Ter.																				
5.	DACOTAS OR SIOUX	27.	Lake Calhoun Band	Minnesota Ter.	8	...	...	2	.....	.....	1	6	2	2	$1000									
		28.	Goodroad's Band	Minnesota Ter.																				
		29.	Black Dog's Band	Minnesota Ter.																				
		30.	Little Six's Band	Minnesota Ter.	8	...	...	2	.....	.....	....	5	....	....	$1000									
		31.	Wa-ba-shaw's Band	Minnesota Ter.																				
6.	QUAPAWS	32.	Neosho Agency	Missouri	1	...	...	1	1	.....	....	1	1	....	$2000									
					17			5	3	8	2	14	5	3	$6000									

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Plue" or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita received from the Government.
1.	OMAHAS	1.	Omahas	S. of the Mo.	....	...	...	....	....	...	300	...	150	...	...	208	$262.00	$0.75	2536	$7,049.00	
2.	OTOES	2.	Otoes	S. of the Mo.	....	...	7	....	....	...	231	...	225	...	...	350	$375.00	$3.87	900	$780.00	$3.00
		3.	Little Hills' Band	W. of the Miss.	....	...	...	....	....	...	128	...	138	...	...	89	$448.00	.....	.....	$814.00	
		4.	Little Decorrie's Band	W. of the Miss.	....	...	...	....	....	...	62	...	92	...	...	61	$304.00	.....	.....	$365.00	$18.50
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	....	...	...	....	....	...	41	...	59	...	...	54	$228.00	.....	.....	$1,343.00	
		6.	Ho-pee-kaw's Band	W. of the Miss.	....	...	2	....	....	...	66	...	48	...	1	87	$445.00	.....	.....	$800.00	
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	....	...	...	....	....	...	58	...	62	...	...	57	$261.00	.....	.....	$1,185.00	
		8.	Baptiste's Band	W. of the Miss.	..	..	2	....	....	...	45	...	51	...	...	41	$221.50	.....	.....	$638.00	
		9.	Wee-noo-shik's Band	W. of the Miss.	....	...	...	....	....	...	36	...	53	...	...	67	$262.50	.....	.....	$930.00	$18.50
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.	....	...	...	....	....	...	50	...	44	...	1	39	$226.50	.....	.....	$199.75	$18.50
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	....	...	...	....	....	...	40	...	43	...	1	27	$156.00	.....	.....	$208.00	$18.50
		12.	Taw-nu-nuk's Band	W. of the Miss.	....	...	...	....	....	...	53	...	38	...	1	27	$132.00	.....	.....	$345.00	$18.50
3.	WINNEBAGOES	13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	....	...	...	....	....	...	42	...	35	...	...	36	$167.00	.....	.....	$418.00	$18.50
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	....	...	...	....	....	...	34	...	32	...	...	28	$138.00	.....	.....	$200.00	$18.50
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	....	...	...	....	....	...	26	...	41	...	...	54	$235.00	.....	.....	$800.00	$18.50
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	....	...	...	....	....	...	50	...	56	...	1	59	$277.50	.....	.....	$629.00	$18.50
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.	....	...	...	....	....	...	14	...	15	...	...	48	$185.00	.....	.....	$900.00	$18.50
		18.	Good Thunder's Band	W. of the Miss.	....	...	...	....	....	...	29	...	33	...	1	27	$156.50	.....	.....	$223.00	$18.50
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	....	...	...	....	....	...	15	...	25	...	...	34	$133.00	.....	.....	$400.00	$18.50
		20.	Black Hawk's Band	W. of the Miss.	....	...	...	....	....	...	13	...	26	...	...	39	$156.50	.....	.....	$600.00	$18.50
		21.	Little Thunder's Band	W. of the Miss.	....	...	...	....	....	...	45	...	42	...	...	68	$285.75	.....	.....	$900.00	$18.50
		22.	Naw-key-ku-kaw's Band	W. of the Miss.	....	....	...	....	....	...	25	...	30	...	...	21	$89.50	.....	.....	$100.00	$18.50
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	....	...	...	....	....	...	20	...	20	...	1	15	$156.00	.....	.....	$150.00	$18.50
4.	IOWAS	24.	Division not designated	W. of the Mo.	....	...	...	....	....	...	300	...	150	...	...	150	$300.00	$1.50	400	.....	$9.50
		25.	Red Wing's Village	Minnesota Ter.	....	...	8	1	3	...	105	...	100	...	...	25	.....	.....	.....	.....	$4.00
		26.	Little Crow's Village	Minnesota Ter.	....	....	...	1	10	...	97	...	102	...	...	30	.....	.....	.....	$15.00	$4.00
5.	DACOTAS OR SIOUX	27.	Lake Calhoun Band	Minnesota Ter.	....	....	4	1	4	...	105	...	93	...	...	.....	.....	$3	.....	$15.00	$4.00
		28.	Goodroad's Band	Minnesota Ter.	....	...	6	1	2	...	76	...	66	48	...	10	.....	$3	.....	.....	$4.00
		29.	Black Dog's Band	Minnesota Ter.	.. .	...	4	....	2	...	90	....	82	...	1	20	.....	.....	.....	.....	$4.00
		30.	Little Six's Band	Minnesota Ter.	....	...	...	....	....	...	221	...	154	...	...	17	.....	.....	.....	.....	$12.00
		31.	Wa-ba-shaw's Band	Minnesota Ter.	....	...	2	1	1	...	110	....	5	...	...	25	.....	.....	.....	.....	$4.00
6.	QUAPAWS	32.	Neosho Agency	Missouri	....	400	65	5	5	...	250	20	243	...	...	262	$2,996.00	$500	1000	.....	$4.00
						400	100	10	27		2777	20	2133	48	8	2055	$8,437.25		4836	$21,006.75	

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.	105 Number of the native Priesthood who officiate as Public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.
1.	OMAHAS	1.	Omahas	S. of the Mo.	10	11	.....	...	.....	$7461.00	...	9	2	11	4	300	6		
2.	OTOES	2.	Otoes	S. of the Mo.	5	3	.....	...	.....	$4105.00	...	4	1	5	6	300	6		
3.	WINNEBAGOES.	3.	Little Hills' Band	W. of the Miss.	4	5	.....	6	.....	$6872.00									
		4.	Little Decorrie's Band	W. of the Miss.	.....	.....	214	...	.....	$5780.80									
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	.....	.....	188	...	.....	$4950.89									
		6.	Ho-pee-kaw's Band	W. of the Miss.	1	1	177	...	.....	$5459.20									
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	.....	.....	167	9	.....	$4754.20									
		8.	Baptiste's Band	W. of the Miss.	.....	.....	.....	10	.....	$3698.80									
		9.	Wee-noo-shik's Band	W. of the Miss.	.....	2	.....	1	.....	$3719.50									
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.	.....	.....	.....	1	.....	$2201.25									
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	.....	.....	60	1	1	$2281.25									
		12.	Taw-nu-nuk's Band	W. of the Miss.	1	1	65	7	.....	$2791.50									
		13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	.....	1	78	8	.....	$2517.00									
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	.....	.....	78	1	.....	$1904.00									
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	.....	.....	.....	...	.....	$3233.30									
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	1	1	.....	5	.....	$3905.00									
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.	.....	.....	.....	1	.....	$2243.50									
		18.	Good Thunder's Band	W. of the Miss.	.....	.....	56	4	.....	$1821.50									
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	.....	.....	.....	9	.....	$2356.00									
		20.	Black Hawk's Band	W. of the Miss.	.....	.....	77	1	.....	$1967.00									
		21.	Little Thunder's Band	W. of the Miss.	.....	.....	.....	4	.....	$3086.50									
		22.	Naw-key-ku-kaw's Band	W. of the Miss.	.....	.....	37	5	.....	$1092.50									
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	.....	21	.....	1	.....	$865.75									
4.	IOWAS	24.	Division not designated	W. of the Mo.	.....	.....	744	2	.....	.....	....	2	2	1	60	150	2	$7,105	
5.	DACOTAS OR SIOUX	25.	Red Wing's Village	Minnesota Ter.	.....	.....	All.	60	.....	Per Capita. $30.00	...	.....	7	4	14	500	50	$10,000	$10,000
		26.	Little Crow's Village	Minnesota Ter.	2	8	All.	24	.....	Per Capita. $35.00									
		27.	Lake Calhoun Band	Minnesota Ter.	.....	3	All.	20	.....	Per Capita. $35.00									
		28.	Goodroad's Band	Minnesota Ter.	.....	.....	200	15	.....	Per Capita. $35.00									
		29.	Black Dog's Band	Minnesota Ter.	.....	.....	.....	15	.....	Per Capita. $35.00									
		30.	Little Six's Band	Minnesota Ter.	.....	.....	86	50	.....	$1155.00	....	.....	7	14	14	500	50	$10,000	$10,000
		31.	Wa-ba-shaw's Band	Minnesota Ter.	.....	.....	.....	70	.....	$25.00									
6.	QUAPAWS	32.	Neosho Agency	Missouri	.....	.....	271	...	.....	.....	....	5	4	.....	....	90	.....	$2,000	
					24	57		260	1			20	23	35	98	1840	114	$29,105	$20,000

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Manmakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.	54 Number of Bushels of Oats raised.	55 Number of Bushels of Beans raised.
1.	OMAHAS	1.	Omahas	S. of the Mo...	.....	7	2	.....	.....	...	....	....	....	39	25	30	1,200	....	30	....	100
2.	OTOES	2.	Otoes	S. of the Mo...	4	.....	...	.....	.....	...	....	....	....	25	.....	50	2,500	....	100	....	200
3.	WINNEBAGOES.	3.	Little Hills' Band	W. of the Miss.	41	36	25	12	7	21	....	....	46	23	3,096	91	2,076	....	100	....	15½
		4.	Little Decorrie's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	2,737	12⅔	238				
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	2,857	3¼	84				
		6.	Ho-pee-kaw's Band	W. of the Miss.	.....	1	...	.....	2	...	....	....	....	.....	2,267	60	1,840	....	50	....	15
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	2	.....	1	.....	.....	1	....	....	2	1	2,239	14	280				
		8.	Baptiste's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	2	1,956	18	362				
		9.	Wee-noo-shik's Band	W. of the Miss.	2	.....	...	.....	.....	...	....	....	2	1	1,720	12	297	....	10	....	2
		10.	Con-a-ha-tă-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	984	20	438	....	40	....	6
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	13	.....	2	.....	.....	9	....	.....	11	19	1,001	35	754	....	5	....	2
		12.	Taw-nu-nuk's Band	W. of the Miss.	13	15	12	.....	3	7	....	....	14	7	.....	37	738	....	25		
		13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	1	....	....	....	1	965	40	1,080	....	20	....	15
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	15	.....	...	.....	.....	5	....	....	5	4	955	10	400	....	.....	....	1
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	.....	5	87				
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	19	.....	...	.....	.....	13	....	....	19	13	.....	15	330				
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	997	6½	113				
		18.	Good Thunder's Band	W. of the Miss.	3	.....	...	.....	.....	1	....	....	2	1	742	25	551	....	50		
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	3	.....	...	.....	.....	3	....	....	4	3	1,211	10	182				
		20.	Black Hawk's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	927	⅝	10				
		21.	Little Thunder's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	1,606	18	256	....	.....	90	
		22.	Naw-key-ku-kaw's Band	W. of the Miss.	10	8	7	1	1	7	....	....	7	6	645	10	196				
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	.....	.....	...	.....	.....	...	....	....	....	.....	277	12	360	....	50	....	5
4.	IOWAS	24.	Division not designated	W. of the Mo...	15	10	8	.....	.....	7	....	....	30	45	1,600	250	8,000	....	100	....	200
5.	DACOTAS OR SIOUX	25.	Red Wing's Village	Minnesota Ter.	.....	.....	...	.....	.....	6	....	....	....	.....	294	173½	5,160	....	110	....	10
		26.	Little Crow's Village	Minnesota Ter.	14	24	...	.....	.....	16	....	....	21	.....	313	86¾	2,115½				
		27.	Lake Calhoun Band	Minnesota Ter.	.....	.....	...	.....	.....	...	....	....	....	.....	254	38	1,140	....	200		
		28.	Goodroad's Band	Minnesota Ter.	.....	.....	...	.....	.....	...	....	....	....	.....	200	41	1,230				
		29.	Black Dog's Band	Minnesota Ter.	.....	.....	...	.....	.....	...	....	....	....	.....	218	30	900	....	.....	....	10
		30.	Little Six's Band	Minnesota Ter.	.....	.....	...	.....	.....	...	....	....	....	.....	472	156	1,800				
		31.	Wa-ba-shaw's Band	Minnesota Ter.	.....	.....	...	.....	.....	...	....	....	....	.....	250	15	450				
6.	QUAPAWS	32.	Neosho Agency	Missouri	.....	22	1	.....	.....	6	....	....	33	70	.....	228	3,840	300	400	....	810
					154	123	58	13	13	103			196	230	30,709	1553⅛	39,007½	300	1290	90	1391½

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen.	73 Number of Milch Cows.	74 Other Neat Cattle.	75 Number of Sheep.
1.	OMAHAS..	1.	Omahas	S. of the Mo...	....	....	....	....	....	....	.....	1,000	.....	...	...	.....	...	$412.00	176	9				
2.	OTOES.....	2.	Otoes	S. of the Mo...	....	....	....	....	....	....	.....	1,000	.....	...	...	.....	...	$825.00	230	20				
		3.	Little Hills' Band	W. of the Miss.	....	....	....	....	....	....	.....	225	1,190	...	...	.....	...	$1161.50	119	1				
		4.	Little Decorrie's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	745	...	...	85	...	$200.30	67					
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	1,045	...	...	120	...	$148.10	63					
		6.	Ho-pee-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	230	1,700	...	...	130	...	$1139.90	96	1				
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	420	...	...	140	...	$192.70	65					
		8.	Baptiste's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	720	...	...	60	...	$257.80	55					
		9.	Wee-noo-shik's Band	W. of the Miss.	....	....	....	....	....	....	.....	70	300	...	...	.....	...	$195.00	79					
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.	....	....	45	....	....	....	.....	1,040	2,925	...	...	155	...	$584.00	42					
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	1,350	...	...	.....	...	$526.25	31	1				
3.	WINNE-BAGOES.	12.	Taw-nu-nuk's Band	W. of the Miss.	....	....	....	....	....	....	.....	90	.....	...	...	.....	...	$390.50	30					
		13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	515	...	...	170	...	$636.50	61					
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	80	320	...	...	.....	...	$237.00	30					
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	320	...	...	150	...	$87.50	64					
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	70	950	...	...	.....	...	$258.50	71	1				
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	.....	...	...	.....	...	$56.50	61					
		18.	Good Thunder's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	1,705	...	...	.....	...	$462.00	40					
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	290	...	...	.....	...	$118.00	30					
		20.	Black Hawk's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	.....	...	...	.....	...	$5.00	52					
		21.	Little Thunder's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	.....	...	...	.....	...	$156.75	75					
		22.	Naw-kay-ku-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	.....	.....	...	...	.....	...	$98.00	18					
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	....	....	....	....	....	....	.....	45	700	...	...	.....	...	$307.25	16					
4.	*IOWAS*.....	24.	*Division not designated*	*W. of the Mo...*	....	....	60	....	....	....	.....	3,500	.....	...	...	250	...	$50.00	150	2				
		25.	Red Wing's Village	Minnesota Ter.	....	....	....	....	....	....	.....	.....	600	...	...	300	...	$25.00	20					
		26.	Little Crow's Village	Minnesota Ter.	....	....	....	....	....	....	.....	.....	500	...	...	200	...	$65.00	30					
		27.	Lake Calhoun Band	Minnesota Ter.	....	....	....	....	....	....	.....	.....	500	...	...	100	...	$15.00	10					
5.	DACOTAS OR SIOUX	28.	Goodroad's Band	Minnesota Ter.	....	....	....	....	....	....	.....	.....	500	...	...	100	...	$15.00	10					
		29.	Black Dog's Band	Minnesota Ter.	....	....	....	....	....	....	.....	.....	400	...	...	200	....	$20.00	20					
		30.	Little Six's Band	Minnesota Ter.	....	....	....	....	....	....	.....	.....	4,580	...	...	200	...	$20.00						
		31.	*Wa-ba-shaw's Band*	*Minnesota Ter.*	....	....	....	....	....	....	.....	.....	250	...	...	300	....	.....	25					
6.	*QUAPAWS*	32.	Neosho Agency	Missouri	....	....	....	....	....	....	1000	5,000	.....	...	500	260	250	.....	350	....	24	160	300	
							105				1000	12,350	22,525		500	2920	250	$8616.05	2186	35	24	160	300	

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.
1.	OMAHAS..	1.	Omahas	S. of the Miss.	172	1349	242	238	406	463	.....	.....	.....	22	39	33	25	22	16	15	6		
2.	OTOES.....	2.	Otoes	S. of the Miss.	201	903	93	90	319	380	21	.....	.....	11	9	10	26	24	9	7			
		3.	Little Hills' Band	W. of the Miss.	46	260	77	70	52	55	6	.....	.....	6	7	7	9	5	6	2			
		4.	Little Decorrie's Band	W. of the Miss.	37	225	58	60	51	50	6	.....	.....	6	5	5	14	10	9	6			
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	30	188	38	39	51	50	10	.....	.....	.....	7	10	12	12	10				
		6.	Ho-pee-kaw's Band	W. of the Miss.	36	187	45	48	43	42	9	1	5	4	.....	6	11	9	6	6			
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	31	181	47	50	41	37	6	.....	.....	3	2	5	14	11	9	8			
		8.	Baptiste's Band	W. of the Miss.	28	148	38	26	35	45	4	.....	.....	4	.....	9	12	12	8	3			
		9.	Wee-noo-shik's Band	W. of the Miss.	18	133	41	35	30	24	3	.....	.....	.....	2	3	6	3	6	4			
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.	17	75	14	15	21	22	3	.....	.....	.....	.....	4	6	4	6	3			
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	14	82	25	20	17	17	3	.....	.....	.....	.....	2	2	2	3				
		12.	Taw-nu-nuk's Band	W. of the Miss.	16	109	32	27	23	23	4	1	.....	2	2	2	2	1	2	2			
3.	WINNE-BAGOES.	13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	13	81	23	19	19	20	.....	.....	.....	2	1	1	4	2	3	1			
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	14	78	22	18	16	18	4	.....	.....	.....	.....	2	3	4	1	2			
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	16	120	35	31	23	25	6	.....	.....	.....	.....	3	6	4	5	2			
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	18	160	40	40	38	33	9	.....	.....	1	2	4	10	5	5	1			
		17.	Waw-kon-chaw-zu-kaw's Band	W. of the Miss.	12	79	20	19	18	18	4	.....	.....	.....	.....	3	6	3	4	2			
		18.	Good Thunder's Band	W. of the Miss.	11	59	17	15	11	12	4	.....	.....	1	1	3	4	2	3	2			
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	16	98	24	27	20	22	5	.....	.....	.....	.....	3	6	5	4	2			
		20.	Black Hawk's Band	W. of the Miss.	13	77	22	22	16	15	2	.....	.....	.....	.....	3	6	3	4	3			
		21.	Little Thunder's Band	W. of the Miss.	26	123	30	28	28	34	3	.....	.....	3	3	3	6	3	4	4			
		22.	Naw-key-ku-kaw's Band	W. of the Miss.	13	47	11	9	13	11	3	.....	.....	.....	.....	1	2	...	...	1	1		
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	6	21	4	5	5	6	1	.....	.....	.....	.....	.....	1						
4.	IOWAS.....	24.	Division not designated	W. of the Mo...	191	744	180	160	150	180	74	.....	.....	30	26	.....	30	25	50	40	...	...	1
		25.	Red Wing's Village	Minnesota Ter.	70	121	.....	.....	55	66													
		26.	Little Crow's Village	Minnesota Ter.	70	132	61	71	.....	.....	.....	.....	.....	1	6								
5.	DACOTAS OR SIOUX	27.	Lake Calhoun Band	Minnesota Ter.	63	107	.....	.....	38	69	.....	.....	.....	2	3	.....	...	...	2	3			
		28.	Goodroad's Band	Minnesota Ter.	47	113	.....	36	51	26													
		29.	Black Dog's Band	Minnesota Ter.	60	96	.....	.....	45	51													
		30.	Little Six's Band	Minnesota Ter.	109	203	5	.....	75	102	21	3	2	6	2								
		31.	Wa-ba-shaw's Band	Minnesota Ter.	55	291	.....	.....	36	55													
6.	QUAPAWS	32.	Neosho Agency	Missouri	81	271	59	60	70	81	1	.....	.....	.....	.....	.....	13	4	3	2			
					1550	6661	1303	1278	1816	2052	212	5	7	104	117	122	236	175	121	178	7		1

CENSUS RETURNS.—III. DACOTA GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.
1.	OMAHAS	1.	Omahas	S. of the Mo...	...	.....	.....	1	.....	1	...	...	...	....	...	.....	.....	3	3	9			
2.	OTOES	2.	Otoes	S. of the Mo...	...	.....	.....	1	.....	.....	...	...	...	...	...	.....	.....	...	.....	.....	...	...	4
		3.	Little Hills' Band	W. of the Miss.	...	.....	46	.....	.....	.....	...	...	...	...	...	.....	.....	35	41	16	...	...	35
		4.	Little Decorrie's Band	W. of the Miss.	...	21	15	2	1														
		5.	Maw-kuh-soonch-kaw's Band	W. of the Miss.	1	30																	
		6.	Ho-peg-kaw's Band	W. of the Miss.	...	.....	30	2	1	.....	...	...	...	...	...	.....	.....	...	.....	1			
		7.	Waw-kon-haw-kaw's Band	W. of the Miss.	1	15	16	1	.....	.....	...	...	...	....	...	.....	.....	1	2	3	...	...	1
		8.	Baptiste's Band	W. of the Miss.	...	2	26	2															
		9.	Wee-noo-shik's Band	W. of the Miss.	...	7	11	.....	2	.....	...	...	...	....	...	.....	.....	1	2	.....	...	...	1
		10.	Con-a-ha-ta-kaw's Band	W. of the Miss.	...	.....	17																
		11.	Paw-sed-ech-kaw's Band	W. of the Miss.	...	.....	14	.....	.....	.....	...	...	...	...	...	.....	.....	18	19	.....	...	...	17
3.	WINNEBAGOES	12.	Taw-nu-nuk's Band	W. of the Miss.	...	.....	16	2	.....	.....	...	...	...	...	...	.....	.....	10	13	3	...	...	10
		13.	Ah-hoo-zeeb-kaw's Band	W. of the Miss.	...	.....	13	.....	1														
		14.	Is-chaw-go-baw-kaw's Band	W. of the Miss.	...	.....	14	.....	.....	.....	...	...	...	...	...	.....	.....	18	15	.....	...	...	18
		15.	Watch-ha-ta-kaw's Band	W. of the Miss.	...	13	3																
		16.	Waw-maw-noo-kaw-kaw's Band	W. of the Miss.	...	18	1	.....	.....	.....	...	...	...	...	...	.....	.....	14	19	.....	...	...	14
		17.	Waw-kon-haw-zu-kaw's Band	W. of the Miss.	...	8	4																
		18.	Good Thunder's Band	W. of the Miss.	...	.....	11	.....	.....	.....	...	...	...	...	...	.....	.....	...	3				
		19.	Koog-ay-ray-kaw's Band	W. of the Miss.	1	6	10	.....	.....	.....	...	...	...	...	...	.....	.....	1	3	.....	...	...	1
		20.	Black Hawk's Band	W. of the Miss.	...	13																	
		21.	Little Thunder's Band	W. of the Miss.	...	4	11																
		22.	Naw-key-ku-kaw's Band	W. of the Miss.	...	.....	13	.....	.....	.....	...	...	...	...	...	.....	.....	5	10	1	...	...	5
		23.	O-chin-chin-nu-kaw's Band	W. of the Miss.	...	.....	6																
4.	IOWAS	24.	Division not designated	W. of the Mo...	...	100	90	1	.....	.....	...	...	....	...	...	.....	.....	18	15	10	...	...	18
		25.	Red Wing's Village	Minnesota Ter.	...	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	20	20				
		26.	Little Crow's Village	Minnesota Ter.	...	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	41	31	2		
		27.	Lake Calhoun Band	Minnesota Ter.																			
5.	DACOTAS OR SIOUX	28.	Goodroad's Band	Minnesota Ter.																			
		29.	Black Dog's Band	Minnesota Ter.																			
		30.	Little Six's Band	Minnesota Ter.	...	17	17																
		31.	Wa-ba-shaw's Band	Minnesota Ter.																			
6.	QUAPAWS	32.	Neosho Agency	Missouri	...	81	81	1	.....	1	...	...	....	...	...	1	.....	20	10	28			
					3	335	505	13	5	2						1		160	216	102	2		124

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or Engagés employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.																		
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	...	...	...	...	1	...	...	...	5	...	1	.....	1	2	.....	$7,000	57	19
		3.	Miamies	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	.....	...	2	.....	4	.....	.....	$1,800	45	
		4.	Weas	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	120	...	1	.....	2	.....	$1200	$25,000	40	25
		5.	Piankeshaws	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	30	...	.....	.....	.....	.....	.....	.....	12	15
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	.....	21
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	...	...	...	21	...	...	...	...	810	...	6	.....	1	.....	$2500	$35,000	610	520
		8.	Pottawatomies of Huron	Michigan	...	...	...	...	...	...	1	...	60	...	.....	.....	.....	.....	$300	.....	15	25
		9.	Kickapoos	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	6	...	2	.....	4	.....	.....	$6,000	107	75
		10.	Shawnees	Ind. Ter. W. of Miss.	...	...	6	25	...	3	...	...	.....	...	1	.....	2	.....	.....	$5,500	.....	257
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	.....	19
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	...	...	...	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	25	29
		13.	Delawares	Ind. Ter. W. of Miss.	...	...	4	12	...	1	...	...	100	1	4	.....	6	.....	.....	$11,000	200	198
4.	MENOMONIES.	14.	Menomonies	Wisconsin	...	...	...	...	...	...	...	...	1650	...	.....	.....	.....	.....	.....	.....	.....	100
							10	58	1	4	1		2781	1	17		20	2	$4000	$84,300	1111	1303

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons living in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children by each Female, taking those between 16 and 60 Years of Age.	171 Value of Bead Work.	172 Amount received for Premises leased.
3.	WESTERN ALGONQUINS, chiefly of the LENAPEE Sub-Type.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.																			
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	...	.....	1	...	.....	30	27	.....	.....	.....	...	200							
		3.	Miamies	Ind. Ter. W. of Miss.	...	.....	7	7	12	12	165	.....	.....	.....	11								
		4.	Weas	Ind. Ter. W. of Miss.	...	.....	30	26	35	15	32												
		5.	Piankeshaws	Ind. Ter. W. of Miss.	...	.....	8	14	26	26	16												
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	.....	.....	5	65	80													
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	4	.....	205	205	1314	1314	95	.....	4	.....	7	112							
		8.	Pottawatomies of Huron	Michigan	2	.....	.....	10	42	61	...	5											
		9.	Kickapoos	Ind. Ter. W. of Miss.	15	.....	6	6	63	250	25	300	.....	.....	...	150							
		10.	Shawnees	Ind. Ter. W. of Miss.	...	.....	63	63	408	415	50	.....	12	1	...	150							
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	1	.....	34	34	12	27	12												
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	.....	18	18	44	44	14												
		13.	Delawares	Ind. Ter. W. of Miss.	...	.....	65	65	120	150	70	186	.....	.....	2	650							
4.	MENOMONIES.	14.	Menomonies	Wisconsin	...	.....	.....	131	.....	150	...	15											
					22		437	584	2141	2574	506	506	16	1	20	1262							

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.	105 Number of the native Priesthood who officiate as Public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and all other Persons employed by Authority.	116 Number of United States Agents.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.															
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	3	3	45	.....	$4,500.00	.....	...	.....	.....	$770	$1600	$1000			
		3.	Miamies	Ind. Ter. W. of Miss.	4	...	54	.....	$348.79	.....	...	$200	$140	$2000					
		4.	Weas	Ind. Ter. W. of Miss.	3	...	41	.....	$3,000.00										
		5.	Piankashaws	Ind. Ter. W. of Miss.	2	...	30	.....	$800.00										
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	.....	...	21												
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	7	...	450	.....	$53,862.00	.....	...	.....	$140	.....	.....	$480	$200	$4190	
		8.	Pottawatomies of Huron	Michigan	1	...	.....	.....	$800.00	.....	...	.....	.....	$350					
		9.	Kickapoos	Ind. Ter. W. of Miss.	4	1	107	.....	$5,000.00	.....	...	.....	.....	.....	.....	.....	.....	.....	1
		10.	Shawnees	Ind. Ter. W. of Miss.	4	4	257	.....	$4,500.00	.....	...	.....	.....	.....	.....	.....	.....	.....	1
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	1	1	23	.....	$70.00	.....	...	.....	.....	.....	.....	.....	.....	.....	1
		12.	Christian Indians	Ind. Ter. W. of Miss.	3	...	25	.....	$400.00	.....	...	.....	.....	.....	.....	.....	.....	.....	1
		13.	Delawares	Ind. Ter. W. of Miss.	3	3	200	.....	$6,500.00	.....	...	.....	.....	.....	.....	.....	.....	.....	1
4.	MENOMONIES.	14.	Menomonies	Wisconsin	7														
					42	12	1252		$79,780.79			$200	$280	$3120	$1600	$1480	$200	$4190	5

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	117 Number of Sub-Agents.	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.	121 Number of Farmers and Assistants.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.
3.	WESTERN ALGONQUINS, chiefly of the LENAPEE Sub-Type.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.																				
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	1	...	1	1	1	...	...	...	2	4	...	.....	...	...	.....	...	1			
		3.	Miamies	Ind. Ter. W. of Miss.	...	...	1																	
		4.	Weas	Ind. Ter. W. of Miss.	...	....	1																	
		5.	Piankeshaws	Ind. Ter. W. of Miss.																				
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	....	...	...	...	....	...	...	.....	.....	...	.....	...	...	.....	...	1			
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	1	....	1	4	...	...	...	...	.....	.....	...	3	3	3	$800	1	2	...	...	2
		8.	Pottawatomies of Huron	Michigan	...	....	...	...	....	...	...	...	1	.....	...	1	1	...	$100					
		9.	Kickapoos	Ind. Ter. W. of Miss.	...	....	1	...	....	...	...	...	.....	.....	...	1	...	2	$1100					
		10.	Shawnees	Ind. Ter. W. of Miss.	...	...	1	4	....	...	...	...	.....	.....	1	3	3	2	.....	1	1	...	...	12
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	...	...	...	...	....	...	...	...	.....	.....	...	.....	...	...	.....	...	...	...	...	1
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	...	1	...	....	...	...	...	.....	.....	...	1	1	1	$1300					
		13.	Delawares	Ind. Ter. W. of Miss.	...	...	1	2	...	...	...	...	.....	.....	...	2	1	2	$2500	1	1	...	...	6
4.	MENOMONIES.	14.	Menomonies	Wisconsin	...	...	...	...	...	...	...	2	.....	.....	...	1	...	2	$25					
					2		8	11	1			2	3	4	1	12	9	12	$5825	3	6			21

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	71 Number of Mules.	72 Number of Oxen.	73 Number of Milch Cows.	74 Other Neat Cattle.	75 Number of Sheep.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.
		1.	Sacs and Foxes	Ind. Ter. W. of Miss.																		
		2.	Sacs and Foxes of Missouri	Ind. Ter. W. of Miss.	...	...	.....	.....	...	.....	.....	10	....	3	...	47	3	47	2	...	113	$94.00
		3.	Miamies	Ind. Ter. W. of Miss.	...	...	.....	.....	...	.....	.....	...	....	...	...	.....	.....	42	...	...	56	$590.00
		4.	Weas	Ind. Ter. W. of Miss.	...	12	15	25	...	.....	32	25	....	8	...	53	5	53	...	...	63	$530.00
		5.	Piankashaws	Ind. Ter. W. of Miss.	...	12	15	25	....	.....	40	12	....	6	...	30	3	54	...	...	41	$334.00
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	4	6	10	....	.....	20	20	....	2	...	20	3	25	...	...	30	$290.00
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	32	80	211	256	...	.....	289	135	56	140	25	548	94	628	...	7	986	$11,812.00
		8.	Pottawatomies of Huron	Michigan	...	4	.....	2	....	.....	16	2	...	3	...	32	3	26	2	1	25	$50.00
		9.	Kickapoos	Ind. Ter. W. of Miss.	10	103	100	183	....	.....	553	113	...	66	2	182	10	218	...	7	620	$3,636.00
		10.	Shawnees	Ind. Ter. W. of Miss.	7	461	492	1048	156	156	3554	334	84	270	17	536	217	486	81	6	830	$4,492.06
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	...	16	31	70	18	18	187	12	...	18	...	30	1	31	1	4	46	$767.00
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	29	81	116	....	.....	483	21	2	15	...	94	7	80	12	...	51	$826.50
		13.	Delawares	Ind. Ter. W. of Miss.	27	158	376	807	128	159	2639	160	28	122	7	508	134	458	81	3	949	$7,672.50
4.	MENOMONIES.	14.	Menomonies	Wisconsin	...	10	20	10	...	.....	100	15	...	20	...	300	10	500	2	...	75	$500.00
					76	889	1347	2552	302	333	7913	859	170	673	51	2380	490	2648	191	28	3885	$42,594.06

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	89 Average Value of the "Plue," or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita received from the Government.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).
		1.	Sacs and Foxes	Ind. Ter. W. of Miss.	.....	2,450											
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	.....	.....	$570.00	$17.00	.....	.....	148	...	.....	$3,987.00	...	.....	2
		3.	Miamies	Ind. Ter. W. of Miss.	.....	.....	.....	$121.00	5	7	.....	...	.....	$36,144.00	...	2	1
		4.	Weas	Ind. Ter. W. of Miss.	.....	180	.....	$19.50	8	15	.....	...	1	$4,510.00	...	1	1
		5.	Piankeshaws	Ind. Ter. W. of Miss.	.....	150	.....	$7.50	12	14	.....	...	2	$1,944.00	...	1	1
3.	WESTERN ALGONQUINS, chiefly of the LENAPEE Sub-Type.	6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	.....	.....	.....	.....	30	35	.....	...	.....	$1,296.00	...	1	1
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	.....	4,960	$6.00	$30.00	384	679	112	...	14	$79,418.00	...	3	1
		8.	Pottawatomies of Huron	Michigan	$150	300	$20.00	$6.50	21	21	.....	61	2	.....	...	.....	1
		9.	Kickapoos	Ind. Ter. W. of Miss.	.....	798	$591.63	$14.40	29	34	.....	...	4	$11,648.76	...	1	1
		10.	Shawnees	Ind. Ter. W. of Miss.	.....	191	$109.00	$3.55	51	70	2	103	15	$35,645.21	...	3	1
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	.....	23	$14.50	$1.11	4	8	.....	...	2	$2,071.99	...	1	1
		12.	Christian Indians	Ind. Ter. W. of Miss.	.....	305	$190.75	$3.03	12	32	.....	...	2	$3,403.91	...	1	2
		13.	Delawares	Ind. Ter. W. of Miss.	.....	3,558	$1,709.20	$7.19	31	46	134	...	10	$26,518.49	...	3	2
4.	MENOMONIES.	14.	Menomonies	Wisconsin	.....	1,500	.....	.....	147	183	1400	137	2	.....	...	.....	3
					$150	14,415	$3,211.08		734	1144	1796	301	54	$206,587.36		17	19

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Mantuamakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.	54 Number of Bushels of Oats raised.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.																
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	...	...	...	.....	.....	.....	...	....	.....	.....	.....	55	2,050	1000	300	500
		3.	Miamies	Ind. Ter. W. of Miss.	...	8	5	.....	.....	91	....	....	.....	91	241	227	4,000	.....	60	
		4.	Weas	Ind. Ter. W. of Miss.	...	12	11	.....	.....	45	...	....	125	45	178	80	2,000	.....	220	75
		5.	Piankashaws	Ind. Ter. W. of Miss.	...	7	8	.....	.....	28	...	....	116	28	87	60	1,500	.....	85	60
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	3	2	.....	.....	31	...	....	60	31	110	80	2,000	.....	150	200
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	...	110	91	15	19	276	...	....	525	703	3276	1875	44,875	550	815	1,019
		8.	Pottawatomies of Huron	Michigan	8	7	3	.....	.....	2	...	....	.....	2	200	35	150	28	60	
		9.	Kickapoos	Ind. Ter. W. of Miss.	...	3	...	.....	.....	2	...	....	.....	4	.....	417	11,120	.....	2,005	885
		10.	Shawnees	Ind. Ter. W. of Miss.	...	34	19	1	4	37	...	....	108	1	.....	2965½	55,591	1805	5,606	11,733
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	...	23	11	6	4	9	...	....	22	1	.....	158	3,292½	50	445	780
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	9	9	.....	.....	4	...	....	20	.....	.....	181	2,510	40	780	375
		13.	Delawares	Ind. Ter. W. of Miss.	12	38	19	5	1	20	...	....	50	1	.....	1582	26,169	822	4,116	1,990
4.	MENOMONIES.	14.	Menomonies	Wisconsin	35	88	82	10	.....	.....	...	....	.....	50	.....	160	4,000	60	1,000	60
					55	342	260	37	28	545			1026	957	4092	7975½	149,257½	4355	15,632	17,677

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	55 Number of Bushels of Beans raised.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.																
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	55	...	...	.....	...	...	...	.....	4,500	210	...	.....	.....	...	$880.00	113
		3.	Miamies	Ind. Ter. W. of Miss.	25	...	...	.....	...	...	...	.....	2,500	.....	...	.....	.....	...	$1,255.00	71
		4.	Weas	Ind. Ter. W. of Miss.	25	...	...	65	...	...	...	132	578	218	...	.....	280	18	$1,420.00	80
		5.	Piankeshaws	Ind. Ter. W. of Miss.	22	...	...	45	...	...	...	32	485	500	...	.....	325	11	$1,069.00	60
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	25	...	...	60	...	...	...	25	250	.....	...	.....	200	8	$1,296 00	70
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	541	...	48	701	...	...	...	1761	21,620	2,482	...	226	1,873	257	$23,056.00	1128
		8.	Pottawatomies of Huron	Michigan	12	...	...	5	...	...	...	17	500	800	...	.....	50	...	.....	32
		9.	Kickapoos	Ind. Ter. W. of Miss.	266	...	35	.....	...	...	...	103	9,532	300	...	50	1,389	60	$6,057.22	523
		10.	Shawnees	Ind. Ter. W. of Miss.	534	65	5	335	...	...	5	3904	54,730	.....	...	13,919	9,196	296	$32,386.00	1348
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	23	...	...	.....	...	...	...	81	2,050	.....	...	1,770	210	25	$1,997.50	65
		12.	Christian Indians	Ind. Ter. W. of Miss.	95	1	...	.....	...	...	...	286	7,410	.....	40	1,585	3,286	44	$2,813.20	89
		13.	Delawares	Ind. Ter. W. of Miss.	580	67	15	895	...	...	25	2679	42,130	4,815	185	7,817	11,883	212	$18,311.50	1480
4.	MENOMONIES.	14.	Menomonies	Wisconsin	200	30	...	300	...	...	...	.....	.....	3,500	...	200	600	10	$175.00	
					2404	163	103	2406			30	9020	146,285	12,825	225	25,567	29,292	941	$89,716.42	5059

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.	315	1578																	
		2.	Sacs and Foxes of Missouri.	Ind. Ter. W. of Miss.	19	147	16	26	57	47	1	2	.....	.....	3	3	4	2	7	6			
		3.	Miamies	Ind. Ter. W. of Miss.	65	286	53	68	74	91	.....	1	.....	.....	.....	10	9	5	18	10			
		4.	Weas	Ind. Ter. W. of Miss.	55	154	25	43	53	33	.....	1	.....	11	7	11	9	6	7	6			
		5.	Piankashaws	Ind. Ter. W. of Miss.	25	107	24	17	35	31	.....	.....	.....	.....	.....	15	4	6	3	5			
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	14	84	18	14	21	31	.....	.....	.....	.....	.....	6	9	6	7	3			
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	501	1797	425	276	404	629	63	5	.....	29	22	62	37	41	63	52			
		8.	Pottawatomies of Huron	Michigan	.....	63	16	11	15	17	4	1	.....	.....	.....	5	3	...	1	2			
		9.	Kickapoos	Ind. Ter. W. of Miss.	58	347	57	66	107	112	5	1	.....	8	7	11	5	7	10	5			
		10.	Shawnees	Ind. Ter. W. of Miss.	175	886	217	195	205	227	42	6	.....	15	23	27	17	19	18	13			
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	19	54	8	8	23	14	1	.....	.....	1	1	1	2	1	3	1			
		12.	Christian Indians	Ind. Ter. W. of Miss.	30	132	36	30	25	38	3	.....	.....	1	.....	3	4	1	3	8			
		13.	Delawares	Ind. Ter. W. of Miss.	147	903	214	209	196	265	19	8	5	15	17	40	16	23	33	23	2		
4.	MENOMONIES.	14.	Menomonies	Wisconsin	112	416	87	99	103	117	10	1	.....	35	22	16	22	16	8	7			
					1535	6954	1196	1062	1318	1652	148	26	5	115	102	210	141	133	181	141	2		

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.
3.	WESTERN ALGONQUINS, CHIEFLY OF THE LENAPEE SUB-TYPE.	1.	Sacs and Foxes	Ind. Ter. W. of Miss.	...	.....	19																
		2.	Sacs and Foxes of Missouri	Ind. Ter. W. of Miss.	...	.....	19																
		3.	Miamies	Ind. Ter. W. of Miss.	...	.....	12	1	.....	.....	...	...	...	...	...	1	.....	...	.....	5			
		4.	Weas	Ind. Ter. W. of Miss.	...	8	25	1	.....	.....	...	...	...	...	...	1	.....	8	10	25	...	1	
		5.	Piankashaws	Ind. Ter. W. of Miss.	...	12	15	.....	.....	.....	...	...	...	...	...	1	.....	9	6	15	1	1	
		6.	Peorias and Kaskaskias	Ind. Ter. W. of Miss.	...	.....	14	.....	.....	.....	...	...	...	...	...	.....	.....	3	2	15			
		7.	Pottawatomies, West	Ind. Ter. W. of Miss.	...	172	297	15	4	1	7	1	...	...	11	5	2	82	94	147	3		
		8.	Pottawatomies of Huron	Michigan	...	2	12	1	1	.....	...	...	...	...	2	.....	.....	13	8	5	...	1	13
		9.	Kickapoos	Ind. Ter. W. of Miss.	1	4	54	.....	.....	.....	1	...	...	...	...	.....	.....	3	3	3	...	...	2
		10.	Shawnees	Ind. Ter. W. of Miss.	...	.....	169	11	.....	2	2	3	1	...	...	1	.....	46	25	67			
		11.	Stockbridges, West	Ind. Ter. W. of Miss.	...	.....	19	.....	.....	.....	3	...	...	...	...	.....	1	3	6	12			
		12.	Christian Indians	Ind. Ter. W. of Miss.	...	1	29	3	.....	.....	1	...	...	...	...	.....	.....	14	13	13			
		13.	Delawares	Ind. Ter. W. of Miss.	...	19	127	15	5	1	5	2	2	7	...	.....	.....	37	32	76	1	1	8
4.	MENOMONIES.	14.	Menomonies	Wisconsin	..	.....	.....	.....	1	.....	4	1	...	...	...	1	.....	30	27	10	1	1	25
					1	218	801	47	11	4	23	7	3	7	13	10	3	248	226	393	6	5	48

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	140 Number of Spinning-Wheels.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *Engagés* employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	.....	...	...	...	...	.....	...	1	.....	1	.....	220	$2000	80	80		
		2.	L'Arbre Croche Ottowas	Michigan	.....	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	...	251		
		3.	Village of the Cross	Michigan	.....	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	...	165		
		4.	Middle Village	Michigan	.....	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	...	72		
		5.	Aegakötchëising	Michigan	.....	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	2	8		
		6.	Cheböigan	Michigan	.....	...	...	...	...	.....	...	.....	.....	.....	.....	.....	.....	...	61		
		7.	Old Wing Colony Band	Michigan																	
		8.	Ottowa Colony Band	Michigan	.....	...	...	...	...	150	...	.....	.....	.....	.....	900	.....	30	30		
		9.	Griswold Colony Band	Michigan	.....	...	...	...	...	127	...	.....	8	.....	.....	.....	.....	...	...	1	
		~~10.~~	Ottowas of Grand River Valley	Michigan																	
		11.	Grand Rapids Band	Michigan																	
		12.	Flat River Band	Michigan																	
		13.	Thorn Apple River Band	Michigan																	
		14.	Maple River Band	Michigan																	
		15.	Fort Village Band	Michigan																	
										277		1	8	1		1120	$2000	112	667	1	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	157 Total Number, of all Classes, who have been educated.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons living in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children by each Female, taking those between 16 and 60 Years of Age.	171 Value of Bead Work.	172 Amount received for Premises leased.	173 Number of Heathen.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	25	25	96	160													
		2.	L'Arbre Croche Ottowas	Michigan	251	83	251	251	1												
		3.	Village of the Cross	Michigan	165	55	165	165	1	.....	1										
		4.	Middle Village	Michigan	72	24	72	35	1												
		5.	Aegakötchëising	Michigan	8	3	47	35	2												
		6.	Cheböigan	Michigan	61	20	61	35	2												
		7.	Old Wing Colony Band	Michigan																	
		8.	Ottowa Colony Band	Michigan	60	20	24	30	20												
		9.	Griswold Colony Band	Michigan	30	20	45	80	5	.....	.....	.....	.....	103							
		10.	Ottowas of Grand River Valley	Michigan	.....	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	37
		11.	Grand Rapids Band	Michigan																	
		12.	Flat River Band	Michigan	.....	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	174
		13.	Thorn Apple River Band	Michigan	.....	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	82
		14.	Maple River Band	Michigan	.....	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	96
		15.	Fort Village Band	Michigan	.....	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	67
					672	250	761	791	32		1			103							456

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	104 Number of Warriors fit to take the Field.	105 Number of the native Priesthood who officiate as Public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and all other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents.	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	45		$2600														
		2.	L'Arbre Croche Ottowas	Michigan	50																
		3.	Village of the Cross	Michigan	42																
		4.	Middle Village	Michigan	20																
		5.	Aegakötchëising	Michigan	10																
		6.	Cheböigan	Michigan	15																
		7.	Old Wing Colony Band	Michigan	17	1															
		8.	Ottowa Colony Band	Michigan	30	.....	.....	.....	.....	...	...	.....	.....	...	.....	.....	1	...	1	2	
		9.	Griswold Colony Band	Michigan	...	.....	.....	.....	$38.50	$3	$2	.....	.....	...	.....	$11.00	1	...	...	1	
		10.	Ottowas of Grand River Valley	Michigan																	
		11.	Grand Rapids Band	Michigan																	
		12.	Flat River Band	Michigan																	
		13.	Thorn Apple River Band	Michigan																	
		14.	Maple River Band	Michigan																	
		15.	Fort Village Band	Michigan																	
					229	1	$2600		$38.50	$3	$2					$11.00	2		1	3	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	121 Number of Farmers and Assistants.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	...	...	...	.....	.....	.....	1	1	1	1	$850								
		2.	L'Arbre Croche Ottowas	Michigan	...	...	...	3	1	251													
		3.	Village of the Cross	Michigan	...	...	...	2	1	165													
		4.	Middle Village	Michigan	...	...	...	1	.....	72													
		5.	Aegakötchëising	Michigan	...	...	...	.....	.....	47													
		6.	Cheböigan	Michigan	...	...	...	2	.....	61													
		7.	Old Wing Colony Band	Michigan																			
		8.	Ottowa Colony Band	Michigan	1	...	...	3	2	.....	...	2	1	1	$800								
		9.	Griswold Colony Band	Michigan	1	8	...	1	1	.....	...	2	1	1	$300	...	...	...	...	1			
		10.	Ottowas of Grand River Valley	Michigan																			
		11.	Grand Rapids Band	Michigan																			
		12.	Flat River Band	Michigan																			
		13.	Thorn Apple River Band	Michigan																			
		14.	Maple River Band	Michigan																			
		15.	Fort Village Band	Michigan																			
					2	8		12	5	596	1	5	3	3	$1950					1			

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	73 Number of Milch Cows.	74 Other Neat Cattle.	75 Number of Sheep.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Waggons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Pile" or "Skin," in the technical Sense of the Trade.	90 Number of "Skins" made during the Year.
		1.	Ottowas of the Osage	Indian Territory W.	50	60	...	...	200	22	...	15	...	145	12	110	...	....	66	$637	$220.00	450
		2.	L'Arbre Croche Ottowas	Michigan	20	...	...	...	400	2	4	25	...	300	50	500	10	....	30	$1800	$1.00	
		3.	Village of the Cross	Michigan	7	...	...	...	250	1	2	20	...	280	42	450	50	....	25	$1300		
		4.	Middle Village	Michigan	9	...	...	...	40	...	...	10	...	120	12	350	...	....	20	$1100		
		5.	Aegakötchëising	Michigan	2	...	...	...	25	...	...	.....	...	100	15	80	...	....	2	$900		
		6.	Cheböigan	Michigan	20	...	...	...	120	1	...	20	...	150	30	150	2	.....	5	$3000		
		7.	Old Wing Colony Band	Michigan	...	...	...	...	6	...	1	4	...	21	2	30	...	....	6	.....	$101.55	210
2.	OTTOWAS.	8.	Ottowa Colony Band	Michigan	...	6	...	...	130	6	...	2	...	93	11	90	1	2	70	$262	$900.00	130
		9.	Griswold Colony Band	Michigan	...	...	...	...	44	4	...	4	1	30	12	40	1	....	30	.....	$3.00	30
		10.	Ottowas of Grand River Valley	Michigan	...	...	...	...	.....	...	...	.....	...	7	...	2	...	....	7	.....	$96.50	
		11.	Grand Rapids Band	Michigan	9	8	...	...	91	7	4	10	...	91	4	78	2	2	64			
		12.	Flat River Band	Michigan	...	...	...	...	14	1	2	.....	...	51	1	61	...	....	92	.....	$342 30	
		13.	Thorn Apple River Band	Michigan	...	...	...	...	.....	...	...	.....	...	34	...	36	...	....	32	.....	$321.00	
		14.	Maple River Band	Michigan	...	...	...	...	15	...	...	.....	...	42	...	43	...	....	26			
		15.	Fort Village Band	Michigan	...	...	...	...	6	...	...	.....	...	27	...	38	...	....	7			
					117	74			1341	44	13	110	1	1491	191	2058	66	4	482	$8999	$1985.35	820

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita received from the Government.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	$6.00	$11.00	41	55	.....	251	6	$119.00	.....	1	2	3	
		2.	L'Arbre Croche Ottowas	Michigan	.....	.....	591	480	.....	165	4	.....	.....	1	1	9	
		3.	Village of the Cross	Michigan	.....	.....	.....	.....	.....	72	4	.....	.....	1	1	5	
		4.	Middle Village	Michigan	.....	.....	.....	.....	.....	.....	2	.....	.....	1	1	1	
		5.	Aegakötchëising	Michigan	.....	.....	.....	.....	2	24	1	.....	.....	1	1	.....	4
		6.	Chebŏigan	Michigan	.....	.....	.....	.....	.....	61	2	.....	.....	1	1	2	
		7.	Old Wing Colony Band	Michigan	$746.80	$9.30	14	6	.....	7	.....	.....	.....	.....	1		
		8.	Ottŏwa Colony Band	Michigan	$50.00	$9.30	12	8	20	30	1	.....	.....	1	1	1	
		9.	Griswold Colony Band	Michigan	$40.00	$9.30	25	20	1	40	.....	.....	.....	.....	1	2	
		10.	Ottowas of Grand River Valley	Michigan													
		11.	Grand Rapids Band	Michigan	$352.00	.....	62	81	48	.....	5						
		12.	Flat River Band	Michigan													
		13.	Thorn Apple River Band	Michigan													
		14.	Maple River Band	Michigan	$229.00	.....	6	5									
		15.	Fort Village Band	Michigan	$330.00												
					$1753.80		751	655	71	650	25	$119.00		7	10	23	4

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Mantuamakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	...	...	...	8	3	.....	.....	5	...	...	56	74	.....	400	8,000	...	700
		2.	L'Arbre Croche Ottowas	Michigan	1	25	22	150	60	.....	.....	...	...	...	...	.....	.....	1200	10,500	...	24,300
		3.	Village of the Cross	Michigan	...	15	20	110	90	.....	.....	...	...	...	...	.....	.....	700	7,800	...	8,850
		4.	Middle Village	Michigan	...	12	8	40	10	.....	.....	...	...	...	...	.....	.....	680	2,200	...	2,850
		5.	Aegakötchëising	Michigan	...	...	...	8	3	.....	.....	...	...	...	...	.....	.....	300	1,500	...	1,200
		6.	Cheböigan	Michigan	...	10	5	30	20	.....	.....	...	...	...	...	.....	.....	350	1,600	...	1,000
		7.	Old Wing Colony Band	Michigan	...	...	...	14	2	7	.....	...	...	...	...	6	104	40½	309	40	256
		8.	Ottowa Colony Band	Michigan	1	...	...	11	9	7	4	12	...	...	...	.....	.....	127½	553	...	295
		9.	Griswold Colony Band	Michigan	...	10	6	2	...	2	.....	...	...	...	1	24	200	60	800	140	500
		10.	Ottowas of Grand River Valley	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	1¾	15½	...	12
		11.	Grand Rapids Band	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	100¾	707	79	470½
		12.	Flat River Band	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	59¾	576¼	30	220
		13.	Thorn Apple River Band	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	24	154	...	39
		14.	Maple River Band	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	16½	182	...	169
		15.	Fort Village Band	Michigan	...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	12½	145	...	48
					2	72	61	373	197	16	4	17			57	104	304	4072¼	35,041¾	289	40,909½

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	54 Number of Bushels of Oats raised.	55 Number of Bushels of Beans raised.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	1500	350	...	...	400	...	...	...	400	3,500	.....	...	200	500	30	$5675	150	...	30
		2.	L'Arbre Croche Ottowas	Michigan	930	140	160	...	500	...	...	...	...	4,500	112,000	...	300	.....	50	$450	75		
		3.	Village of the Cross	Michigan	50	120	10	...	200	...	...	...	...	2,500	100,000	...	210	.....	30	$400	44	...	2
		4.	Middle Village	Michigan	100	102	20	...	300	...	...	...	...	520	27,200	...	...	.....	...	$300	26		
		5.	Aegakötchëising	Michigan	.....	50	5	...	40	...	...	...	...	400	25,000	...	...	.....	...	$300	2		
		6.	Cheböigan	Michigan	300	100	50	...	400	...	...	...	...	4,000	18,000	...	120	.....	40	.....	50		
		7.	Old Wing Colony Band	Michigan	.....	3	...	...	.....	...	...	...	...	1,000	9,020	...	...	245	...	$30	7		
		8.	Ottowa Colony Band	Michigan	730	47	...	...	.....	...	...	...	150	900	3,060	...	...	30	...	$32	63	...	6
		9.	Griswold Colony Band	Michigan	50	40	...	...	.....	...	...	...	19	1,000	1,500	...	...	300	....	.....	43	...	3
		10.	Ottowas of Grand River Valley	Michigan	.....	.....	...	...	.....	...	...	...	...	150	435	...	...	.....	...	.....	3		
		11.	Grand Rapids Band	Michigan	15	49½	...	...	.....	...	...	...	...	1,165	9,170	...	...	.....	...	.....	68	...	20
		12.	Flat River Band	Michigan	.....	6½	...	...	.....	...	...	...	...	483	5,010	...	...	.....	...	.....	53		
		13.	Thorn Apple River Band	Michigan	.....	18	...	...	.....	...	...	...	...	1,065	2,510	...	...	.....	...	.....	27		
		14.	Maple River Band	Michigan	.....	15	...	...	.....	...	...	...	...	65	3,380	...	...	.....	...	.....	21	...	4
		15.	Fort Village Band	Michigan	.....	12	...	...	.....	...	...	...	...	650	3,895	...	...	.....	...	.....	12		
					3715	1053	245		1840				569	21,898	320,180		830	1075	150	$7187	644		65

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.
2.	OTTOWAS.	1.	Ottowas of the Osage	Indian Territory W.	73	236	42	40	80	74	.....	3	.....	12	13	.....	16	12	12	7			
		2.	L'Arbre Croche Ottowas	Michigan	50	261	77	52	62	62	8	.....	.....	.....	.....	5	7	4	4	4			
		3.	Village of the Cross	Michigan	42	167	46	43	35	39	4	.....	.....	.....	1	7	5	3	1	1			
		4.	Middle Village	Michigan	17	72	23	11	17	18	3	.....	.....	.....	.....	.....	2	1	2				
		5.	Aegakötchëising	Michigan	7	48	14	8	14	11	1	.....	.....	3	4	.....	2	2					
		6.	Cheböigan	Michigan	14	61	15	14	17	15	.....	.....	.....	.....	.....	.....	1	1	2	6			
		7.	Old Wing Colony Band	Michigan	34	140	31	39	36	33	1	1	.....	9	3	2	3	1	7	4			
		8.	Ottowa Colony Band	Michigan	40	146	41	32	38	32	3	1	.....	1	.....	.....	...	1	9	3	...	1	
		9.	Griswold Colony Band	Michigan	32	96	24	16	24	22	10	.....	.....	1	.....	3	4	2	...	2			
		10.	Ottowas of Grand River Valley	Michigan	11	38	9	8	9	12													
		11.	Grand Rapids Band	Michigan	30	190	57	44	39	47	3												
		12.	Flat River Band	Michigan	44	176	61	36	37	42	.....	.....	.....	.....	.....	.....	1						
		13.	Thorn Apple River Band	Michigan	26	81	14	24	22	21													
		14.	Maple River Band	Michigan	44	129	34	31	32	32													
		15.	Fort Village Band	Michigan	26	101	26	33	18	24													
					490	1942	514	431	480	484	33	5		26	21	17	41	27	37	27		1	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.
		1.	Ottowas of the Osage	Indian Territory W.	...	7	65	.....	.....	.....	...	...	.....	...	...	1	.....	6	5	13	
		2.	L'Arbre Croche Ottowas	Michigan	...	.....	50	.....	.....	1	20	2	.....	...	5	.....	2	27	32	.....	2
		3.	Village of the Cross	Michigan	...	.....	42	.....	.....	.....	15	...	.....	...	10	.....	.....	17	24	.....	2
		4.	Middle Village	Michigan	...	.....	17	.....	.....	.....	7	...	.....	...	5	.....	1	11	10	.....	1
		5.	Aegakötchëising	Michigan	1																
		6.	Cheböigan	Michigan	...	.....	14	.....	.....	.....	6	...	.....	...	6	.....	1				
		7.	Old Wing Colony Band	Michigan	...	.....	11	1	.....	.....	1	...	.....	...	...	3	.....	17	8	2	
2.	OTTOWAS.	8.	Ottowa Colony Band	Michigan	1	20	20	3	4	.....	2	1	2	...	1	.....	.....	13	10	16	1
		9.	Griswold Colony Band	Michigan	...	.....	24	1	.....	.....	...	...	.....	...	...	.....	.....	12	5	4	1
		10.	Ottowas of Grand River Valley	Michigan																	
		11.	Grand Rapids Band	Michigan																	
		12.	Flat River Band	Michigan																	
		13.	Thorn Apple River Band	Michigan																	
		14.	Maple River Band	Michigan																	
		15.	Fort Village Band	Michigan																	
					2	27	243	5	4	1	51	3	2		27	4	4	103	94	35	7

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 No. of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *Engagés* employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.
			Chippewas of Lake Superior.																		
		25.	Ance Kewywenon	Lake Superior																	
		26.	Ontonagon	Lake Superior																	
		27.	View Desert and Source of the Wisconsin	Lake Superior																	
		28.	La Pointe and Vicinity	Lake Superior																	
		29.	Fond du Lac	Lake Superior																	
		30.	Old Grand Portage	Lake Superior																	
			Chippewas of St. Croix Valley.																		
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																	
		32.	Forks of the St. Croix	St. Croix Valley																	
		33.	Yellow Lake, &c.	St. Croix Valley																	
		34.	Puckwaewa of Snake River	St. Croix Valley																	
		35.	Namekagon River	St. Croix Valley																	
			Chippewas of Chippewa Valley.																		
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																	
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																	
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																	
			Chippewas of the Upper Mississippi.																		
		39.	Sandy Lake	Upper Mississippi																	
		40.	Milles Lacs	Upper Mississippi																	
		41.	Lower Red Cedar Lake	Upper Mississippi																	
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																	
		43.	Gull Lake	Upper Mississippi																	
		44.	Leech Lake	Upper Mississippi																	
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																	
		46.	Puckaguma Falls	Upper Mississippi																	
		47.	Little Lake Winnipec	Upper Mississippi																	
		48.	Red Lake	West of Height of Land																	
			Chippewas of Rainy Lake.																		
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																	
		50.	Rainy Lake	Upper St. Louis River																	
		51.	Pembena of Red River	Red River; North																	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons living in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children in each Female, taking those between 16 and 50 Years of Age.	171 Value of Bead Work.	172 Amount received for Premises leased.	173 Number of Barrels of Fish sold.	174 Amount received for Fish.
			Chippewas of Lake Superior.																		
		25.	Ance Kewywenon	Lake Superior																	
		26.	Ontonagon	Lake Superior																	
		27.	View Desert and Source of the Wisconsin	Lake Superior																	
		28.	La Pointe and Vicinity	Lake Superior																	
		29.	Fond du Lac	Lake Superior																	
		30.	Old Grand Portage	Lake Superior																	
			Chippewas of St. Croix Valley.																		
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																	
		32.	Forks of the St. Croix	St. Croix Valley																	
		33.	Yellow Lake, &c.	St. Croix Valley																	
		34.	Puckwaewa of Snake River	St. Croix Valley																	
		35.	Namekagon River	St. Croix Valley																	
			Chippewas of Chippewa Valley.																		
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																	
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																	
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																	
			Chippewas of the Upper Mississippi.																		
		39.	Sandy Lake	Upper Mississippi																	
		40.	Milles Lacs	Upper Mississippi																	
		41.	Lower Red Cedar Lake	Upper Mississippi																	
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																	
		43.	Gull Lake	Upper Mississippi																	
		44.	Leech Lake	Upper Mississippi																	
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																	
		46.	Puckaguma Falls	Upper Mississippi																	
		47.	Little Lake Winnipec	Upper Mississippi																	
		48.	Red Lake	West of Height of Land																	
			Chippewas of Rainy Lake.																		
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																	
		50.	Rainy Lake	Upper St. Louis River																	
		51.	Pembena of Red River	Red River, North																	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	105 Number of the native Priesthood who officiate as Public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.	121 Number of Farmers and Assistants.
			Chippewas of Lake Superior.																		
		25.	Ance Kewywenon	Lake Superior																	
		26.	Ontonagon	Lake Superior																	
		27.	View Desert and Source of the Wisconsin	Lake Superior																	
		28.	La Pointe and Vicinity	Lake Superior																	
		29.	Fond du Lac	Lake Superior																	
		30.	Old Grand Portage	Lake Superior																	
			Chippewas of St. Croix Valley.																		
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																	
		32.	Forks of the St. Croix	St. Croix Valley																	
		33.	Yellow Lake, &c.	St. Croix Valley																	
		34.	Puckwaewa of Snake River	St. Croix Valley																	
		35.	Namekagon River	St. Croix Valley																	
			Chippewas of Chippewa Valley.																		
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																	
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																	
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																	
			Chippewas of the Upper Mississippi.																		
		39.	Sandy Lake	Upper Mississippi																	
		40.	Milles Lacs	Upper Mississippi																	
		41.	Lower Red Cedar Lake	Upper Mississippi																	
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																	
		43.	Gull Lake	Upper Mississippi																	
		44.	Leech Lake	Upper Mississippi																	
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																	
		46.	Puckaguma Falls	Upper Mississippi																	
		47.	Little Lake Winnipec	Upper Mississippi																	
		48.	Red Lake	West of Height of Land																	
			Chippewas of Rainy Lake.																		
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																	
		50.	Rainy Lake	Upper St. Louis River																	
		51.	Pembena of Red River	Red River, North																	

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 No. of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.
			Chippewas of Lake Superior.																				
		25.	Ance Kewywenon	Lake Superior																			
		26.	Ontonagon	Lake Superior																			
		27.	View Desert and Source of the Wisconsin	Lake Superior																			
		28.	La Pointe and Vicinity	Lake Superior																			
		29.	Fond du Lac	Lake Superior																			
		30.	Old Grand Portage	Lake Superior																			
			Chippewas of St. Croix Valley.																				
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																			
		32.	Forks of the St. Croix	St. Croix Valley																			
		33.	Yellow Lake, &c.	St. Croix Valley																			
		34.	Puckwaewa of Snake River	St. Croix Valley																			
		35.	Namekagon River	St. Croix Valley																			
			Chippewas of Chippewa Valley.																				
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																			
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																			
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																			
			Chippewas of the Upper Mississippi.																				
		39.	Sandy Lake	Upper Mississippi																			
		40.	Milles Lacs	Upper Mississippi																			
		41.	Lower Red Cedar Lake	Upper Mississippi																			
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																			
		43.	Gull Lake	Upper Mississippi																			
		44.	Leech Lake	Upper Mississippi																			
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																			
		46.	Puckaguma Falls	Upper Mississippi																			
		47.	Little Lake Winnipec	Upper Mississippi																			
		48.	Red Lake	West of Height of Land																			
			Chippewas of Rainy Lake.																				
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																			
		50.	Rainy Lake	Upper St. Louis River																			
		51.	Pembena of Red River	Red River, North																			

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	70 Number of Horses.	71 Number of Mules.	72 Number of Oxen.	73 Number of Milch Cows.	74 Other Neat Cattle.	75 Number of Sheep.	76 Number of Fleeces sheared.	77 Number of Hogs.	78 Number of Ploughs.	79 Number of Carts.	80 Number of Log-Chains.	81 Number of Crowbars.	82 Number of Hoes.	83 Number of Spades and Shovels.	84 Number of Axes, broad and narrow.	85 Number of Drays, Harrows, and Drills.	86 Number of Buggies and Pleasure-Wagons.	87 Number of Saddles and Bridles.	88 Estimated Value of Agricultural Implements.	89 Average Value of the "Fine or Skin," in the technical Sense of the Trade.
			Chippewas of Lake Superior.																					
		25.	Ance Kewywenon	Lake Superior																				
		26.	Ontonagon	Lake Superior																				
		27.	View Desert and Source of the Wisconsin	Lake Superior																				
		28.	La Pointe and Vicinity	Lake Superior																				
		29.	Fond du Lac	Lake Superior																				
		30.	Old Grand Portage	Lake Superior																				
			Chippewas of St. Croix Valley.																					
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																				
		32.	Forks of the St. Croix	St. Croix Valley																				
		33.	Yellow Lake, &c.	St. Croix Valley																				
		34.	Puckwaewa of Snake River	St. Croix Valley																				
		35.	Namekagon River	St. Croix Valley																				
			Chippewas of Chippewa Valley.																					
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																				
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																				
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																				
			Chippewas of the Upper Mississippi.																					
		39.	Sandy Lake	Upper Mississippi																				
		40.	Milles Lacs	Upper Mississippi																				
		41.	Lower Red Cedar Lake	Upper Mississippi																				
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																				
		43.	Gull Lake	Upper Mississippi																				
		44.	Leech Lake	Upper Mississippi																				
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																				
		46.	Puckaguma Falls	Upper Mississippi																				
		47.	Little Lake Winnipec	Upper Mississippi																				
		48.	Red Lake	West of Height of Land																				
			Chippewas of Rainy Lake.																					
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																				
		50.	Rainy Lake	Upper St. Louis River																				
		51.	Pembena of Red River	Red River, North																				

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage	Geographical Position.	90 Number of "Skins" made during the Year.	91 Total estimated Value of the Year's Hunt to the Family.	92 Amount of Cash Annuity per Capita received from the Government.	93 Number of Male Professors of the Christian Religion.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 89, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.
			Chippewas of Lake Superior.																
		25.	Ance Kewywenon	Lake Superior															
		26.	Ontonagen	Lake Superior															
		27.	View Desert and Source of the Wisconsin	Lake Superior															
		28.	La Pointe and Vicinity	Lake Superior															
		29.	Bond du Lac	Lake Superior															
		30.	Old Grand Portage	Lake Superior															
			Chippewas of St. Croix Valley.																
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley															
		32.	Forks of the St. Croix	St. Croix Valley															
		33.	Yellow Lake, &c.	St. Croix Valley															
		34.	Puckwaewa of Snake River	St. Croix Valley															
		35.	Namekagon River	St. Croix Valley															
			Chippewas of Chippewa Valley.																
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley															
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley															
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley															
			Chippewas of the Upper Mississippi.																
		39.	Sandy Lake	Upper Mississippi															
		40.	Milles Lacs	Upper Mississippi															
		41.	Lower Red Cedar Lake	Upper Mississippi															
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi															
		43.	Gull Lake	Upper Mississippi															
		44.	Leech Lake	Upper Mississippi															
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi															
		46.	Puckaguma Falls	Upper Mississippi															
		47.	Little Lake Winnipec	Upper Mississippi															
		48.	Red Lake	West of Height of Land															
			Chippewas of Rainy Lake.																
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River															
		50.	Rainy Lake	Upper St. Louis River															
		51.	Pembena of Red River	Red River, North															

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	33 Number of Male Children who attend School.	34 Number of Female Children who attend School.	35 Number of Children who can speak the English Language.	36 Number of Males who are engaged as Teachers.	37 Number of Females who are engaged as Teachers.	38 Number of Male Sabbath-School Scholars.	39 Number of Female Sabbath-School Scholars.	40 Number of Males who can read and write.	41 Number of Females who can read and write.	42 Number of Males who have studied Vocal Music.	43 Number of Females who have studied Vocal Music.	44 Number of Females who can spin, knit, or weave.	45 Number of Pounds of Flax spun.	46 Number of Yards of Homespun wove.	47 Number of Pairs of Stockings knit.	48 Number of Females who can do Seamstress' or Mantuamakers' Work.	49 Number of Garments of all Kinds, made during the Year.	50 Number of Acres of Land cultivated.
			Chippewas of Lake Superior.																			
		25.	Ance Kewywenon	Lake Superior																		
		26.	Ontonagon	Lake Superior																		
		27.	View Desert and Source of the Wisconsin	Lake Superior																		
		28.	La Pointe and Vicinity	Lake Superior																		
		29.	Fond du Lac	Lake Superior																		
		30.	Old Grand Portage	Lake Superior																		
			Chippewas of St. Croix Valley.																			
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																		
		32.	Forks of the St. Croix	St. Croix Valley																		
		33.	Yellow Lake, &c.	St. Croix Valley																		
		34.	Puckwaewa of Snake River	St. Croix Valley																		
		35.	Namekagon River	St. Croix Valley																		
			Chippewas of Chippewa Valley.																			
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																		
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																		
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																		
			Chippewas of the Upper Mississippi.																			
		39.	Sandy Lake	Upper Mississippi																		
		40.	Milles Lacs	Upper Mississippi																		
		41.	Lower Red Cedar Lake	Upper Mississippi																		
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																		
		43.	Gull Lake	Upper Mississippi																		
		44.	Leech Lake	Upper Mississippi																		
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																		
		46.	Puckaguma Falls	Upper Mississippi																		
		47.	Little Lake Winnipec	Upper Mississippi																		
		48.	Red Lake	West of Height of Land																		
			Chippewas of Rainy Lake.																			
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																		
		50.	Rainy Lake	Upper St. Louis River																		
		51.	Pembena of Red River	Red River, North																		

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	51 Number of Bushels of Corn raised.	52 Number of Bushels of Wheat raised.	53 Number of Bushels of Potatoes raised.	54 Number of Bushels of Oats raised.	55 Number of Bushels of Beans raised.	56 Number of Bushels of Peas raised.	57 Number of Bushels of Buckwheat raised.	58 Number of Bushels of Turnips raised.	59 Pounds of Flax raised.	60 Pounds of Hemp raised.	61 Pounds of Cotton picked.	62 Number of Fruit Trees of all Kinds.	63 Number of Melons of all Kinds raised.	64 Pounds of Maple Sugar made.	65 Pounds of Cheese made.	66 Pounds of Butter made.	67 Pounds of Honey, wild or domestic.	68 Number of Beef-Cattle killed or sold.	69 Estimated Value of the Agricultural and Horticultural Products of the Family during the Year.
			Chippewas of Lake Superior.																				
		25.	Ance Kewywenon	Lake Superior																			
		26.	Ontonagon	Lake Superior																			
		27.	View Desert and Source of the Wisconsin	Lake Superior																			
		28.	La Pointe and Vicinity	Lake Superior																			
		29.	Fond du Lac	Lake Superior																			
		30.	Old Grand Portage	Lake Superior																			
			Chippewas of St. Croix Valley.																				
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																			
		32.	Forks of the St. Croix	St. Croix Valley																			
		33.	Yellow Lake, &c.	St. Croix Valley																			
		34.	Puckwaewa of Snake River	St. Croix Valley																			
		35.	Namekagon River	St. Croix Valley																			
			Chippewas of Chippewa Valley.																				
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																			
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																			
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																			
			Chippewas of the Upper Mississippi.																				
		39.	Sandy Lake	Upper Mississippi																			
		40.	Milles Lacs	Upper Mississippi																			
		41.	Lower Red Cedar Lake	Upper Mississippi																			
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																			
		43.	Gull Lake	Upper Mississippi																			
		44.	Leech Lake	Upper Mississippi																			
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																			
		46.	Puckaguma Falls	Upper Mississippi																			
		47.	Little Lake Winnipec	Upper Mississippi																			
		48.	Red Lake	West of Height of Land																			
			Chippewas of Rainy Lake.																				
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																			
		50.	Rainy Lake	Upper St. Louis River																			
		51.	Pembena of Red River	Red River, North																			

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	1 Number of Families in the Tribe or Band.	2 Whole Number of Souls of all Ages and both Sexes.	3 Number of Males under the Age of 18.	4 Number of Females under the Age of 16.	5 Number of Males between the Ages of 18 and 60.	6 Number of Females between the Ages of 16 and 60.	7 Number of both Sexes between the Ages of 60 and 100.	8 Number of European or white Heads of Families, male.	9 Number of European or white Female Heads of Families.	10 Number of Male Children of Half or Mixed Blood.	11 Number of Female Children of Half or Mixed Blood.	12 Number of Marriages in the Family during the Year.	13 Number of Births, Male, within the Year.	14 Number of Births, Female, within the Year.	15 Number of Deaths, Male, within the Year.
			Chippewas of Lake Superior.																
		25.	Ance Kewywenon	Lake Superior	40	216	122	...	43	51									
		26.	Ontonagon	Lake Superior	20	102	60	...	20	22									
		27.	View Desert and Source of the Wisconsin	Lake Superior	70	382	222	...	76	84									
		28.	La Pointe and Vicinity	Lake Superior	90	400	180	...	100	120									
		29.	Fond du Lac	Lake Superior	72	360	199	...	77	84									
		30.	Old Grand Portage	Lake Superior	20	150	93	...	25	32									
			Chippewas of St. Croix Valley.																
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley	7	50	32	...	8	10									
		32.	Forks of the St. Croix	St. Croix Valley	10	57	35	...	10	12									
		33.	Yellow Lake, &c.	St. Croix Valley	26	130	72	...	28	30									
		34.	Puckwaewa of Snake River	St. Croix Valley	25	150	82	...	30	38									
		35.	Namekagon River	St. Croix Valley	18	100	56	...	20	24									
			Chippewas of Chippewa Valley.																
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley	50	300	185	...	55	60									
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley	40	237	140	...	47	50									
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley	120	643	379	...	128	136									
			Chippewas of the Upper Mississippi.																
		39.	Sandy Lake	Upper Mississippi	50	267	154	...	53	60									
		40.	Milles Lacs	Upper Mississippi	48	250	145	...	50	55									
		41.	Lower Red Cedar Lake	Upper Mississippi	12	72	38	...	14	20									
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi	40	233	149	...	40	44									
		43.	Gull Lake	Upper Mississippi	30	204	127	...	36	41									
		44.	Leech Lake	Upper Mississippi	150	800	380	...	200	220									
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi	20	180	117	...	26	37									
		46.	Puckaguma Falls	Upper Mississippi	15	100	58	...	22	20									
		47.	Little Lake Winnipec	Upper Mississippi	22	200	116	...	40	44									
		48.	Red Lake	West of Height of Land	80	400	223	...	81	96									
			Chippewas of Rainy Lake.																
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River	50	290	184	...	52	54									
		50.	Rainy Lake	Upper St. Louis River	8	70	30												
		51.	Pembena of Red River	Red River, North	140	660	300												
					1273	7003	3878		1281	1444									

CENSUS RETURNS.—II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	16 Number of Deaths, Female, within the Year.	17 Number of Deaf and Dumb Persons.	18 Number of Lunatics or Insane.	19 Number of Idiots.	20 Number of Persons born Blind.	21 Number of Heads of Families who subsist their Families by the Chase.	22 Number of Heads of Families who subsist their Families by Agriculture.	23 Number of Males who are employed as Interpreters or Translators.	24 Number of Females who are employed as Interpreters or Translators.	25 Number of Persons occupied as Blacksmiths or Assistants.	26 Number of Persons occupied as Carpenters.	27 Number of Persons occupied as Shoemakers.	28 Number of Persons occupied as Wheelwrights.	29 Number of Persons occupied as Silversmiths.	30 Number of Persons occupied as Tailors.	31 Number of Persons engaged as Principals or Clerks in Trade.	32 Number of Persons who have studied or practise any of the Learned Professions.
			Chippewas of Lake Superior.																		
		25.	Ance Kewywenon	Lake Superior																	
		26.	Ontonagon	Lake Superior																	
		27.	View Desert and Source of the Wisconsin	Lake Superior																	
		28.	La Pointe and Vicinity	Lake Superior																	
		29.	Fond du Lac	Lake Superior																	
		30.	Old Grand Portage	Lake Superior																	
			Chippewas of St. Croix Valley.																		
		31.	Upper Puckwaewa and St. Croix Lake	St. Croix Valley																	
		32.	Forks of the St. Croix	St. Croix Valley																	
		33.	Yellow Lake, &c.	St. Croix Valley																	
		34.	Puckwaewa of Snake River	St. Croix Valley																	
		35.	Namekagon River	St. Croix Valley																	
			Chippewas of Chippewa Valley.																		
		36.	Follavoine, or Red Cedar Fork	Chippewa River Valley																	
1.	CHIPPEWAS..	37.	Lac Courteroille	Chippewa River Valley																	
		38.	Lac du Flambeau and Vicinity	Chippewa River Valley																	
			Chippewas of the Upper Mississippi.																		
		39.	Sandy Lake	Upper Mississippi																	
		40.	Milles Lacs	Upper Mississippi																	
		41.	Lower Red Cedar Lake	Upper Mississippi																	
		42.	Crow Wing River and Otter Tail Lake	Upper Mississippi																	
		43.	Gull Lake	Upper Mississippi																	
		44.	Leech Lake	Upper Mississippi																	
		45.	Upper Red Cedar Lake and Itasca Lake	Upper Mississippi																	
		46.	Puckaguma Falls	Upper Mississippi																	
		47.	Little Lake Winnipec	Upper Mississippi																	
		48.	Red Lake	West of Height of Land																	
			Chippewas of Rainy Lake.																		
		49.	Vermilion Lake and St. Louis River	Upper St. Louis River																	
		50.	Rainy Lake	Upper St. Louis River																	
		51.	Pembena of Red River	Red River, North																	

II. ALGONQUIN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	158 Number of Persons who can read the Scriptures.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons who live in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children in each Female, taking those between 16 and 60 Years of Age.	171 Value of Bead Work.	172 Amount received for Promises leased.	173 Number of Barrels of Fish sold.	174 Amount received for Fish.
			Detroit Chippewas.																			
		1.	Chippewas of Swan Creek and Black River..	Michigan ...																		
		2.	Chippewas of Swan Cr. and Black R., west.	Ind. Ter. W.	5	2	8	6														
			Saganaws.																			
		3.	Saganaws of Pewanuganink	Michigan ...																		
		4.	Saganaws of Natoway's Band	Michigan ...																		
		5.	Band of Ogakaning	Michigan ...																		
		6.	Acawa's Band, Saganaws	Michigan ...																		
		7.	Band of Wabeseepenukaning	Michigan ...																		
			Lake Huron, South.																			
		8.	Chippewas of Thunder Bay	Michigan ...																		
			Chippewas of Grand Traverse Bay.																			
		9.	Eshquagonabee's Band	Michigan ...																		
		10.	Akosa's Band	Michigan ...																		
1.	CHIPPEWAS.	11.	Kagwatosa's Band	Michigan ...																		
		12.	Band at Nagondagon	Michigan ...																		
		13.	Band at Muhzheguning	Michigan ...																		
			Chippewas of Michillimackinac.																			
		14.	Indians of the Beaver Islands	Michigan ...	4	35	33	2														
		15.	Manistee River, north	Michigan ...	24	72	72															
		16.	Shabegoshing, or Carp River	Michigan ...																		
		17.	Ance's Band, Oak Point	Michigan ...																		
		18.	Point St. Ignace	Michigan ...																		
		19.	Chenos, Huron, north	Michigan ...																		
			Straits of St. Mary, &c.																			
		20.	Drummond Island Band	Michigan ...	...	22	77	4	.....	.....	.....	.....	79	...	...	...	.....	...	...	190	$590
		21.	Primary Band of Sault Ste. Marie	Michigan ...	...	120	60	12	.....	.....	.....	1	72	...	...	...	.....	...	...	100	$400
		22.	Waishkee's Bay, foot of Lake Superior	Michigan ...	3	26	21	1	.....	.....	.....	.....	46	...	...	...	.....	...	...	25	$112
		23.	Tacquimenon River	Michigan ...	...	47	49	3	.....	.....	.....	1	3	...	...	...	.....	...	...	200	$600
		24.	Grand Island of Lake Superior	Michigan ...	3	50	50	7	.....	.....	.....	.....	7	...	...	...	.....	...	...	25	$125
					39	374	370	35				2	207							540	$1827

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	94 Number of Female Professors of the Christian Religion.	95 Number of Persons who still adhere to their native Religion.	96 Number of Members of Temperance Societies.	97 Number of Persons who are employed as Catechists, Exhorters, or Aids in the Dissemination of the Gospel in their Tribe.	98 Total estimated Fiscal Means and Resources of the Family, employed in their Subsistence, derived during the Year from Nos. 69, 91, and the aggregate of 92.	99 Average Fiscal Means of each Person in the Tribe.	100 Number of Clans, if the Tribe be organized in Clans.	101 Number of recognised Chiefs of the First Class (Civil).	102 Number of recognised Chiefs of the Second Class (Civil).	103 Number of War-Chiefs.	104 Number of Warriors fit to take the Field.	105 Number of the native Priesthood who officiate as Public Prophets.	106 Amount of Annuities paid in Coin.	107 Amount of Annuities paid in Goods or Merchandise.	108 Amount of Annuities paid in Provisions.
1.	CHICKASAWS.	1.	Division of Slone Love	W. of Arkansas.															
		2.	Division of James Wolf.	W. of Arkansas.															
		3.	Division of Winchester Colbert	W. of Arkansas.															
		4.	Division of Captain Isaac Albertson, Sen.	W. of Arkansas.															
		5.	Division of William Newberry	W. of Arkansas.															
		6.	Division of Captain Jerry	W. of Arkansas.															
2.	CHEROKEES.	7.	Catugajay Creek, Macon County	North Carolina.															
		8.	Paint and Wolf Towns; Upper Qualla Towns.	North Carolina.															
		9.	Bird and Pretty Woman Towns	North Carolina.															
		10.	Cherokee and Buffalo	North Carolina.															
		11.	Neighborhood of Murphy	North Carolina.															

CENSUS RETURNS.—IV. APPALÁCHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	109 Amount of Annuities paid in Tobacco.	110 Amount of Annuities paid in Salt.	111 Sum set apart by the Tribe for Educational Purposes.	112 Sum expended for Cattle, Stock, and Agricultural Implements.	113 Sum expended for Iron, Steel, and Coal.	114 Sum expended by Government for Postage, Stationery, Rent, and other Contingencies.	115 Aggregate Sum expended by Government for Agents, and all other Persons employed by Authority.	116 Number of United States Agents.	117 Number of Sub-Agents.	118 Number of Messengers or Clerks.	119 Number of Interpreters or Translators.	120 Number of Blacksmiths and Assistants.	121 Number of Farmers and Assistants.	122 Number of Carpenters.	123 Number of other Mechanics.	124 Number of Teachers.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.																
		2.	Division of James Wolf.	W. of Arkansas.																
		3.	Division of Winchester Colbert.....	W. of Arkansas.																
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.																
		5.	Division of William Newberry.....	W. of Arkansas.																
		6.	Division of Captain Jerry	W. of Arkansas.																
2.	CHEROKEES.	7.	Catugajay Creek, Macon County.....	North Carolina..																
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																
		9.	Bird and Pretty Woman Towns.....	North Carolina..																
		10.	Cherokee and Buffalo...	North Carolina..																
		11.	Neighborhood of Murphy	North Carolina..																

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	125 Number of Missionaries supported in Part under Treaty Provisions.	126 Number of Persons under special or limited Employment in the Tribe, during the Year.	127 Number of Council-Houses.	128 Number of Mission-Houses or Establishments.	129 Number of School-Houses.	130 Number of Churches.	131 Estimated Value of all Public Buildings.	132 Number of Saw-Mills.	133 Number of Grist-Mills.	134 Number of Carding-Machines.	135 Number of Threshing-Machines.	136 Number of Fanning-Mills.	137 Number of Cotton-Gins.	138 Number of Salt-Works.	139 Number of Looms in the Tribe.	140 Number of Spinning-Wheels.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.																
		2.	Division of James Wolf.	W. of Arkansas.																
		3.	Division of Winchester Colbert.....	W. of Arkansas.																
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.																
		5.	Division of William Newberry.....	W. of Arkansas.																
		6.	Division of Captain Jerry	W. of Arkansas.																
2.	CHEROKEES.	7.	Catugajay Creek, Macon County.....	North Carolina..																
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																
		9.	Bird and Pretty Woman Towns.....	North Carolina..																
		10.	Cherokee and Buffalo...	North Carolina..																
		11.	Neighborhood of Murphy	North Carolina..																

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	141 Number of Horse-Mills.	142 Number of Public Ferries.	143 Number of Fisheries.	144 Number of Mines worked or leased.	145 Number of Kettles used in the Manufacture of Maple Sugar.	146 Number of Printing-Presses in the Nation.	147 Number of licensed Traders under Congress Laws.	148 Estimated Number of unlicensed Traders for Parts of the Tribe still within State Limits.	149 Number of Clerks and Interpreters employed in the Trade.	150 Number of Boatmen, Runners, or *Engagés* employed by the Principals.	151 Aggregate Number of "Skins," reduced to the Trade Standard of Value.	152 Gross Amount of Capital invested in the Trade in 1847.	153 Total Number of Hunters and Warriors.	154 Total Number of Agriculturists.	155 Total Number who profess Medical Skill.	156 Total Number, of all Classes, who officiate as native Priests or Jugglers.	157 Total Number, of all Classes, who have been educated.	158 Number of Persons who can read the Scriptures.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.																		
		2.	Division of James Wolf.	W. of Arkansas.																		
		3.	Division of Winchester Colbert.....	W. of Arkansas.																		
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.																		
		5.	Division of William Newberry.....	W. of Arkansas.																		
		6.	Division of Captain Jerry	W. of Arkansas.																		
2.	CHEROKEES..	7.	Catugajay Creek, Macon County.....	North Carolina..																		
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..																		
		9.	Bird and Pretty Woman Towns.....	North Carolina..																		
		10.	Cherokee and Buffalo...	North Carolina..																		
		11.	Neighborhood of Murphy	North Carolina..																		

CENSUS RETURNS.—IV. APPALACHIAN GROUP.

Number of Tribes or Geographical Sub-Groups.	Main Tribes, or Geographical Sub-Groups.	Number of Bands, or recognised Divisions.	Names of the Divisions of the Group, as known to the Laws, or recognised by Treaties or Usage.	Geographical Position.	159 Total Number of Church Members, of all Christian Denominations.	160 Total Number who are of temperate Habits.	161 Total Number who may be ranked as Inebriates.	162 Total Number of Indians living in the Tribe, but not Members of it, and not entitled to Annuities.	163 Number of colored Slaves, or Persons of African Descent.	164 Number of Captives taken or adopted from other Tribes.	165 Number of Persons living in a State of Polygamy.	166 Total Mass of the Tribe, fixed or roving, to be acted on by Civilization and Christianity.	167 Average Number of the Indian Family.	168 Number of Births over Deaths, during the Year.	169 Number of Deaths over Births, during the Year.	170 Average Number of Children by each Female, taking those between 16 and 60 Years of Age.	171 Value of Bead Work.	172 Amount received for Premises leased.	173 Number of Orphans.	174 Number of crippled Persons.	175 Number of Old and Blind.	176 Number of Persons over 100.
1.	CHICKASAWS.	1.	Division of Slone Love..	W. of Arkansas.	.....	....	...	.....	432	.....	...	.....	...	...	...	.....	...	...	2			
		2.	Division of James Wolf.	W. of Arkansas.	.....	...	...	.....	128													
		3.	Division of Winchester Colbert.....	W. of Arkansas.	.....	...	...	.....	1026	.....	...	.....	...	...	...	.....	...	...	...	1	3	
		4.	Division of Captain Isaac Albertson, Sen.....	W. of Arkansas.	.....	...	....	.....	144													
		5.	Division of William Newberry	W. of Arkansas.	.....	...	....	.....	165													
		6.	Division of Captain Jerry	W. of Arkansas.	.....	...	....	.....	369													
2.	CHEROKEES..	7.	Catugajay Creek, Macon County	North Carolina..																		
		8.	Paint and Wolf Towns; Upper Qualla Towns..	North Carolina..	.....	...	...	.....	.....	.....	...	.....	...	...	...	.....	...	...	4	...	...	2
		9.	Bird and Pretty Woman Towns.....	North Carolina..	.....	...	...	.....	.....	.....	...	.....	...	...	...	.....	...	...	3			
		10.	Cherokee and Buffalo...	North Carolina..																		
		11.	Neighborhood of Murphy	North Carolina..	.....	...	...	.....	.....	.....	...	.....	...	...	...	.....	...	...	1			
									2264										10	1	3	2

TABLES

OF THE

INDIAN POPULATION

OF THE

UNITED STATES.

1. INDIAN POPULATION OF TEXAS, FROM THE LATEST AUTHORITIES

Number of Tribes.	Names of Tribes.		Butler and Davis, 1846.	Burnett, 1847.	Neighbors, 1849.	Consolidated Estimate, 1850.	Number of Warriors, (Neighbors,) 1849.
1.	Comanches or Na-u-ni		14,300	10,000 to 12,000 2,000 to 2,500 m.	20,000	15,000	4,000
2.	Kiowas		.....	.....	1,500	1,500	300
3.	Lipans (Apache stock)		.....	200 w.	500	500	100
4.	Ionies	Associates	1,500	.....	1,400	1,200	280
5.	Caddoes						
6.	An-a-dah-has						
7.	Koechies		.....	.....	300	300	60
8.	Waecoes	Associates	300	.....	1,000	1,000	200
9.	Witchitas						
10.	Tah-wac-carras						
11.	Tonkahiras		.....	750 w.	650	500	130
12.	Mus-ka-le-ras	Apache Bands	4,000	1,000 to 1,500 wa.	2,000	3,500	400
13.	Euquatops		.....	.....	1,500		300
14.	Delawares	Associates	.....	.....	650	525	130
15.	Shawnees						
16.	Creeks		.....	.....	50	50	10
17.	Cherokees		.....	.....	25	25	5
					29,575	24,100	5,915

2. INDIAN POPULATION OF NEW MEXICO, FROM THE LATEST AUTHORITIES.

Number of Tribes.	Names of Tribes.	Number of Fighting Men.	Number of Lodges.	Number of Families living in Houses.	Total Population.
1.	Apaches	1100	850	.....	5,500
2.	Jicarillas, local Apaches	100	100	.....	500
3.	Utahs of Grand Unita River	600	600	.....	3,000
4.	Southern Utahs	250	200	.....	2,000
5.	Comanches	2000	2500	.....	12,000
6.	Kayugas	400	400	.....	2,000
7.	Arapahoes	450	400	.....	1,500
8.	Cheyennes	500	300	.....	1,600
9.	Navajoes*	1000	.....	1000	6,000
10.	Moques*	350	.....	350	2,400
	Pueblos of New Mexico.				
11.	Pueblo de Taos	69	.....	.....	345
12.	Pueblo de Picuris	50	.....	.....	250
13.	Pueblo de San Juan	55	.....	.....	275
14.	Pueblo de Pojuaque	40	.....	.....	200
15.	Pueblo de Santa Clara	70	.....	.....	350
16.	Pueblo de San Ildefonso	50	.....	.....	250
17.	Pueblo de Jemez	90	.....	.....	450
18.	Pueblo de Silla	50	.....	.....	250
19.	Pueblo de Santa Ana	60	.....	.....	300
20.	Pueblo de Cochite	100	.....	.....	500
21.	Pueblo de San Domingo	150	.....	.....	750
22.	Pueblo de San Felipe	55	.....	.....	275
23.	Pueblo de Sandía	80	.....	.....	400
24.	Pueblo de Isletta	90	.....	.....	450
25.	Pueblo de Leutis or Leunis	50	.....	.....	250
26.	Pueblo de Laguna	180	.....	.....	900
27.	Pueblo de Acoma	150	.....	.....	750
28.	Pueblo de Socorro, below El Paso	120	.....	.....	600
29.	Pueblo de Isletta, below El Paso	130	.....	.....	650
30.	Pueblo de Zuñi	597	.....	.....	2,985
	Moqui Pueblos.†				
31.	Oriva	1000	.....	.....	5,000
32.	Sumonpavi	300	.....	.....	1,500
33.	Juparivi	250	.....	.....	1,250
34.	Manzana	180	.....	.....	900
35.	Opquive	130	.....	.....	650
36.	Chemovi	150	.....	.....	750
37.	Tanoquevi	180	.....	.....	900
	Unexplored Part of New Mexico, between the Gila and the Southern Boundary of Utah.				
38.	Ancient Cibolos, N. of the Gila and E. of the Colorado.	.....	.....	.....	20,000
39.	Navajoes, not included above	.....	.....	.....	6,500
40.	Umahs of the Colorado, and not included in California; Umanos of the early Spanish writers‡	.....	.....	.....	5,000
41.	Apaches, not included above	.....	.....	.....	2,000
					92,130

* These tribes are represented as occupying stone dwellings without roofs, and raising sheep, but still of predatory habits, and formidable enemies.

† The Moqui Pueblos are supposed to lie due west from Santa Fé, and three or four days' travel north-west from Zuni. They all speak the same language, but are reported to be separate, distinct, and independent republics; though, for the purpose of mutual protection, they join with each other.

‡ This tribe, to which writers ascribe an early civilization, contradistinguished from hunter-tribes, may be found, as a group, to absorb the people called "Cibolos.

3. INDIAN POPULATION OF CALIFORNIA, AGREEABLY TO THE RETURNS OF THE SPANISH MISSIONARY AUTHORITIES.

No.	Names of Missions.	Date of Establishment.	Population.	Remarks.	Total Population.
1.	San Diego	1769.	1,560	In 1802.	
2.	San Luis Rey de Francia	1798.	600		
3.	San Juan Capistrano	1776.	1,000		
4.	San Gabriel	1771.	1,050		
5.	San Fernando	1797.	600		
6.	San Buenaventura	1782.	950		
7.	Santa Barbara	1786.	1,100		
8.	La Purissima Concepcion	1787.	1,000		
9.	San Luis Obispo	1772.	700		
10.	San Miguel	1797.	600		
11.	Soledad	1791.	571		
12.	San Antonio de Padua	1771.	1,050		
13.	San Carlos de Monterey	1770.	.....	Capital of Province.	
14.	San Juan Bautista	1797.	960		
15.	Santa Cruz	1794.	440		
16.	Santa Clara	1777.	1,300		
17.	San Jose	1797.	630		
18.	San Francisco	1776.	820		
			14,931		
	Mustees and Mulattoes	.....	1,300	In 1802.	
			16,231		
	Wild Mountain Tribes, who were never included in the preceding 18 Spanish Missions	.....	16,000		
			32,231		32,231

In the number of persons of the caste of white and mixed blood, who are put at 1300, there were reported, in 1801 and 1802,—35 marriages, 182 baptisms, and 82 deaths. This part of the population was alone relied on for the defence of the coast, in case of an attack upon it by the maritime powers of Europe. The population of Alta California, in 1803, was 15,600. The following census of the population, including Indians attached to the soil, who have begun to cultivate fields, denotes its gross maximum at three periods; namely,—

In 1790 — 7,748.
In 1801 — 13,668.
In 1802 — 15,562.

At the last period, there were 67,782 oxen; 107,172 sheep; 1040 hogs; 2187 horses, and 877 mules. In 1791, there had been only 24,958 head of black cattle, which denotes a prodigious increase in a short period, and points out the true resources of the climate. According to the tables published by M. Galiano, the Indians sowed in the whole province 874 bushels of wheat, which yielded a harvest of 15,197 bushels. — ALCEDO'S GEO. DICT. LONDON: 1812.

4. INDIAN POPULATION OF OREGON.*

No.	Names of Tribes.	Main Bands.	Warriors.	No.	Names of Tribes.	Main Bands.	Warriors.
	South of the Columbia.				Brought forward...	13,305	2639
1.	Snakes or Shoshonees..	700		30.	Catelamet.....	58	
2.	Ponashita, much intermixed with the Snakes.....	550	80	31.	Caloait.....	200	
				32.	Wakamucks.....	Unknown.	
				33.	Namanamin.....		
				34.	Namoit.....		
3.	Contenay.....	400			*North of the Columbia.*		
4.	Salish or Flat Heads...	320	100				
5.	Calespelins.....over	1,200	450	35.	Makaw or Cape Flattery Indians.....	1,000	
6.	Ponderas or Squiaelps..	1,200	450	36.	Noosclalum.....	1,400	100
7.	Kettle Falls or Coloille Indians.....	800	100	37.	Snoquamish.....	500	
8.	Conerd Helene, or Printed Hearts.....	500	100	38.	Homanish.....	500	
9.	Spokan.....about	1,000		39.	Tuanoh }	500	
10.	Oukinegans.....	700		40.	Hokamish }		
11.	Senpoils.....	500		41.	Quallyamish }		
12.	Nezperces.....	1,500	1000	42.	Picallipannish }	550	
13.	Palvas.....	300		43.	Sinnamish }		
14.	Cayuse.....	800	200	44.	Sinahamish.....	350	
15.	Wallawalla.....	1,000		45.	Snoqualamick.....	350	
16.	Dechutes; Wascopaws.	300		46.	Skeywhamish.....	450	
17.	Wascopaw.....	200		47.	Skagats.....	500	
18.	Mole Alleg.....	100	20	48.	Hookluhmic Indians...	220	
19.	Clackamas.....	60		49.	Cowlitz.....	120	
20.	Willamette Indians.....	20		50.	Chinooks.....	100	
21.	Clickitats.....	180	85	51.	Quenoil }	300	
22.	Calipoa Indians.....	60		52.	Chehaylis }		
23.	Sualatine Indians.....	60	30	53.	Kathlamet }		
24.	Yam Hill Indians.....	90	19	54.	Konick..... }	150	
25.	Suckamier Indians.....	15	5	55.	Wakanascecies }		
26.	Umpqua.....	200		56.	Tilhulhwit.....	200	
27.	Killamuck Indians.....	200		57.	Wyampam.....	130	
28.	Clatsacamin.....	300		58.	Yacaaws.....	1,500	
29.	Clatsop.....	50		59.	Piscahoose.....	350	
	Carried forward.....	13,305	2639		Total.....	22,733	2739

* These are the most recent returns of Governor Lane. A heavy depopulation, compared with any former period, is shown.

5. FLORIDA INDIANS.

Number of Tribes.	Names of Tribes.	Date.	Warriors.	Women and Children.	Total.
1.	Seminoles	1847.	*70	.....	70
2.	Mickasaukies	1847.	*30	.....	30
3.	Creeks	1847.	*12	.....	12
4.	Uchees	1847.	*4	.....	4
5.	Choctaws	1847.	*4	.....	4
	Women and children	.....	.....	*250	250
			120	250	370
	Estimated increase from various sources in 3 years (1850)	.....	.....	.....	54
					424
	Number sent West in 1850	.....	.....	.....	76
	Remaining in 1850, agreeably to these data	.....	.....	.....	348
	Estimate from other sources entitled to respect	.....	.....	.....	500

* Report of Captain John T. Sprague.

6. POPULATION OF THE TERRITORY OF UTAH.

Number of Tribes.	Names of Tribes.		Total Population.
1.	Utahs of the Sources of the Colorado and Great Salt Lake Basin		7,000
2.	Shoshonees	Assimilated.	4,500
3.	Snakes		
4.	Bonacks		
5.	Yumpatick-ara, Root-Eaters		
6.	Koolsatik-ara, Buffalo-Eaters		
7.	Penointik-ara, Sugar or Honey-Eaters		
			11,500

7. ULTIMATE CONSOLIDATED TABLES OF THE INDIAN POPULATION OF THE UNITED STATES.

Names of Tribes.	Number in Tribe.	Total Population.
TABLE I.—Tribes whose Vital and Industrial Statistics have been taken by Bands and Families, under the direction of the Act of Congress.		
A. Iroquois Group	5,922	
B. Algonquin Group*	17,197	
C. Dacota Group*	6,570	
D. Appalachian Group*	5,015	
		34,704
TABLE II.—Tribes of the new States and Territories South and West, including the Acquisitions from Mexico under the Treaty of Guadalupe Hidalgo.		
A. Indian Population of Texas.	24,100	
B. Indian Population of New Mexico	92,130	
C. Indian Population of California	32,231	
D. Indian Population of Oregon.	22,733	
E. Indian Population of Utah	11,500	
F. Indian Population of Florida.	348	
		183,042
TABLE III.—General Schedule of the Tribes located East of the Rocky Mountains and the Line of the Mississippi, in high northern latitudes; all of whom, together with those named in Table No. 2, remain to be enumerated, under the operation of the Indian Census in progress.		
Alabamas. (See *Muskogees.*)		
Assinaboins, south of lat. 49°	1,000	
Apaches. (See *Texas, New Mexico,* and *Utah.*)		
Arapahoes	3,500	
Absarokes, or Crows	4,000	
Aurickarees	1,500	
Blackfeet	13,000	
Blood Indians (few reach the Missouri)	500	
Brothertons	600	
Cherokees	26,000	
Creeks	25,000	
Chickasaws (not enumerated)	5,000	
Choctaws	16,000	
Comanches. (See *Texas.*)		
Cheyennes	2,500	
Carried forward	98,600	217,746

Names of Tribes.	Number in Tribe.	Total Population.
Brought forward	98,600	217,746
Caddoes	2,000	
Chippewas. (See *Algonquin Group.*)		
Chippewas, west, and Red River, north	1,500	
Crees. (None in the United States.)		
Chawas. (See *Cheyennes.*)		
Cayugas. (See *Iroquois Group.*)		
Cayugas and Iroquois, west	30	
Dionondadies. (See *Wyandotts.*)		
Dacotas. (See *Sioux.*)		
Delawares	1,500	
Eutaws. (See *Utahs.*)		
Foxes and Sacs	2,400	
Folle Avoines. (See *Menomonies.*)		
Florida Indians. (See Table 2.)		
Flatheads. (See *Oregon.*)		
Gros Ventres	3,000	
Green Bay Indians. (See *Menomonies* and *Oneidas.*)		
Iowas. (See *Dacota Group.*)		
Kiowas	2,000	
Kickapoos	600	
Kanzas	1,600	
Kaskaskias	200	
Menomonies	2,500	
Mandans	300	
Minitarees	2,500	
Miamies	500	
Missouris	500	
Mohawks. (See *Iroquois Group.*)		
Munsees	200	
Ottowas. (See *Algonquin Group.*)		
Ottowas, west	300	
Otoes	500	
Omahas	2,000	
Oneidas. (See *Iroquois Group.*)		
Onondagas. (See *Iroquois Group.*)		
Ogellahs	1,500	
Pawnees	17,000	
Poncas	700	
Pottawatomies	3,200	
Peorias	150	
Piegans. (See *Satsika, Blood,* and *Blackfeet.*)		
Piankeshaws	200	
Carried forward	145,480	217,746

* The census, in these groups, has been carried no farther, but is in progress.

Names of Tribes.	Number in Tribe.	Total Population.
Brought forward.....	145,480	217,746
Quappas.....	400	
Ricarees. (See *Aurickarees.*)		
Shawnees.....	1,600	
Sioux of the Mississippi (not enumerated in No. 1).....	9,000	
Sioux of the Missouri (not enumerated in No. 1).....	5,500	
Satsika. (See *Blackfeet*, &c.)		
Stockbridges.....	400	
Senecas. (See *Iroquois Group.*)		
St. Regis Tribe. (See *Iroquois Group.*)		
Seminoles.....	1,500	
Senecas and Shawnees. (See *Iroquois Group.*)		
Swan Creek and Black River Chippewas (not enumerated in Algonquin Group).....	200	
Snakes. (See Table 2.)		
Shoshonees. (See Table 2.)		
Tetans.....	3,000	
Tonewandas. (See *Iroquois Group.*)		
Utahs. (See Table 2.)		
Wyandots. (See *Iroquois Group.*)		
Winnebagoes. (See *Dacota Group.*)		
Weas.....	250	
Yanktons. (See *Sioux of the Missouri.*)		
		167,330
TABLE IV.—Fragmentary Tribes still existing within the Boundaries of the old States.		
MAINE—		
Souriquois of St. Johns.....	300	
Passamaquoddies.....	379	
Penobscots.....	277	
	956	
Carried forward.....		385,076

Names of Tribes.	Number in Tribe.	Total Population.
Brought forward.....	956	385,076
MASSACHUSETTS—		
Marshpee.....		
Chippaquadie.....		
Christiantown.....		
Gay Head.....		
Assonets of Troy or Fall River.		
Herring Pond.....	847	
Hasanamico.....		
Punkapog.....		
Natic.....		
Dudley.....		
Grafton.....		
Yarmouth.....		
[All mixed with the African race but 8 or 10.]		
RHODE ISLAND—		
Narragansetts.....	420	
CONNECTICUT—		
Mohegans at Mohegan.....	300	
Mohegans at Stonington.....	50	
Mohegans at Groton.....	50	
NEW YORK—		
Iroquois. (See *Iroquois Group.*)		
Algonquins, not enumerated in Algonquin Group.....	40	
VIRGINIA—		
Nottoways, mixed with the African race.....	40	
SOUTH CAROLINA—		
Catawbas.....	200	
NORTH CAROLINA—		
Catawbas.....	250	
Cherokees. (See Table 1.)		
Total in old States.....	3,153	3,153
Grand Total.....	.....	388,229

[There may, in addition to these numbers, be from 25,000 to 35,000 Indians, within the area of the unexplored territories of the United States.]

HENRY R. SCHOOLCRAFT,

Agent Census, &c., Act of March 3, 1847.

APPROVED,

L. LEA,

Commissioner Indian Affairs.

OFFICE INDIAN AFFAIRS,
JULY 22, 1850.

APPENDIX.

INQUIRIES,

RESPECTING THE HISTORY, PRESENT CONDITION AND FUTURE PROSPECTS,

OF THE

Indian Tribes of the United States.

INQUIRIES, ETC.

HISTORY.

1. ORIGIN.—What facts can be stated, from tradition, respecting the origin, early history and migrations of the tribe; and what are the principal incidents known, or remembered since A. D. 1492? Can they communicate anything on this head, of ancient date which is entitled to respect? What is the earliest event, or name, in their origin or progress, which is preserved by tradition, and from what stock of men have they sprung?

2. TRIBE AND GEOGRAPHICAL POSITION. — By what name are they called, among themselves, and by what name, or names, are they known among other tribes; and what is the meaning of these respective names? State the various synonyms. Where did the tribe dwell, at the earliest date; what was its probable number, and the extent of territory occupied or claimed by it? How has their location, numbers, and the extent of lands or territories, varied since the earliest known period; and what are the general facts, on these heads, at the present time?

3. ANCIENT OR MODERN LOCATION. — Are they of opinion, they were created by the Great Spirit, on the lands, or are they conquerors, or possessors through the events of war, or from other causes? Can they recollect the first interview with whites, or Europeans — the first sale of lands, or treaty made by them — the introduction of fire-arms, woollen clothing, cooking vessels of metal, ardent spirits, the first place of trade, or any other prominent fact in their economical history?

4. VESTIGES OF EARLY TRADITION. — Have they any tradition of the creation, or the deluge, or of their ancestors having lived in other lands, or having had knowledge of any quadrupeds which are foreign to America, or crossed any large waters, in their migration? Is there any idea developed among them by tradition, allegory, or otherwise, that white people, or a more civilized race, had occupied the continent before them?

5. HAVE THEY ANY NAME FOR AMERICA? — If there be no direct term applicable to the entire continent, search their oral traditions in the hope of detecting the name.

6. REMINISCENCES OF FORMER CONDITION. — Did they, before the discovery, live in a greater degree of peace with each other — had they formed any ancient leagues, and if so, of what tribes did they consist, how long did these leagues last, and when and how were they broken? Did they build any forts or mounds in their ancient wars, or were the earth-works we find in the West erected before they arrived, and by whom, in their opinion, were these works erected?

7. NAMES AND EVENTS AS HELPS TO HISTORY. — What events have happened, in their history, of which they feel proud, or by which they have been cast down? What tribes have they conquered, or been conquered by, and who have been their great men? Have they suffered any great calamity in past times, as from great floods, or wild beasts, from epidemic or pestilential diseases, or from fierce and sudden assailants? And have they, in such cases, had any renowned or wise leader, or deliverer?

8. PRESENT RULERS AND CONDITION.—Who is their ruling chief? Who are their present most noted chiefs, speakers, or war captains? State their names, and give brief sketches of their lives. When did the tribe reach their present location, and under what circumstances?

9. LANGUAGES SPOKEN AS A MEANS OF INQUIRY.—Does the tribe speak one or more dialects, or are there several languages spoken, or incorporated in it, requiring more than one interpreter, in transacting business with them? Are there aged persons who can state their traditions?

INTERNATIONAL RANK AND RELATIONS.

10. WHAT RANK AND RELATIONSHIP DOES THE TRIBE BEAR TO OTHER TRIBES?—Do their traditions assign them a superior or inferior position in the political scale of the tribes; and is this relationship sanctioned by the traditions of *other* tribes? To what mode can we resort to settle discordant pretensions to original rank, and affinities of blood? Are their names for themselves, or others, any clue in the latter case, and if *not*, must the languages be essentially relied on, to prove original affinities? Is the relative rank or kindredship of the tribe, denoted by terms taken from the vocabulary of the family ties, as uncle, grandfather, brother, &c.? If so, what tribe is called grandfather, &c.?

11. PROOF FROM MONUMENTS.—Are there belts of wampum, quippas, or monuments of any kind, such as heaps of stone, &c., to prove the former existence of alliances, leagues, or treaties among the tribes? If so, describe them, and the places where they are to be found.

12. PROOF FROM DEVICES.—What is the badge, or, as it has been called, the totem of the tribe—or if it consist of separate clans, or primary families, what is the number of these clans, and what is the badge of each? And do these totems, or badges, denote the rank, or relationship, which is sought to be established by these queries?

13. MAGNITUDE AND RESOURCES OF TERRITORY, A CAUSE OF THE MULTIPLICATION OF TRIBES.—Have geographical features, within the memory of tradition, or the abundance or scarcity of game, had any thing to do with the division and multiplication of tribes and dialects, either among the Atlantic or Western tribes? Are there any remembered feuds, family discords, or striking rivalries among chiefs, or tribes, which have led to such separations, and great multiplication of dialects?

14. PROOFS FROM GEOGRAPHY.—What great geographical features, if any, in North America, such as the Mississippi River, Alleghany Mountains, &c., are alluded to, in their traditions, of the original rank and movements of the tribe: and was the general track of their migrations, *from* or *towards* the NORTH or the EAST?

GEOGRAPHY.

15. FIGURE OF THE GLOBE.—Have the Indians any just ideas of the natural divisions of the earth, into continents, seas and islands? What ideas have they of the form of the earth?

16. LOCAL FEATURES OF THE COUNTRY INHABITED.—What are the chief rivers in the territory or district occupied by the tribe? State their length, general depth and breadth—where they originate—how far they are navigable; what are their principal rapids, falls and portages, at what points goods are landed, and into what principal or larger waters they finally flow.

17. LAKES AND SPRINGS.—Are there any large springs, or lakes, in the district, and what is their character, size and average depth; and into what streams have they outlets? If lakes exist, can they be navigated by steamers; if gigantic springs, do they afford water-power, and to what extent?

18. SURFACE OF THE COUNTRY. — What is the general character of the surface of the country occupied by the tribe? Is it hilly or level — fertile or sterile; abundant or scanty in wood and water — abounding or restricted in the extent of its natural meadows, or prairies? What grains or other products do the Indians raise in the district, and what are its general agricultural advantages, or disadvantages? What are its natural vegetable productions?

19. FACILITIES FOR GRAZING. — Are cattle and stock easily raised — do the prairies and woods afford an abundant supply of herbage spontaneously — are wells of water to be had at moderate depths, where the surface denies springs, or streams, and is there a practicable market for the surplus grain and stock?

20. PHYSICAL EFFECTS OF FIRING THE PRAIRIES. — Has the old practice of the Indians of burning the prairies to facilitate hunting, had the effect to injure the surface of the soil, or to circumscribe, to any extent, the native forests?

21. WASTE LANDS. — Are there any extensive barrens, or deserts, marshes or swamps, reclaimable or irreclaimable, and what effects do they produce on the health of the country, and do they offer any serious obstacles to the construction of roads?

22. EFFECTS OF VOLCANIC ACTION. — Is the quantity of arable land diminished by large areas of arid mountain, or of volcanic tracts of country, with plains of sand and cactus? If so, are these tracts wholly arid and without water, or do they afford a partial supply of herbage for horses, sheep, or mules?

23. CLIMATE. — Is the climate generally dry or humid? Does the heat of the weather vary greatly, or is it distributed, through the different seasons, with regularity and equability? What winds prevail? Is it much subject to storms of rain with heavy thunder, or tornadoes, and do these tempests of rain swell the streams so as to overflow their banks, and destroy fences and injure the crops? State the general character of the climate, giving meteorological tables if you can.

24. SALINE PRODUCTIONS. — Does the district produce any salt springs of value, any caves, yielding saltpetre earth; or any beds of gypsum, or plaister of paris; or of marl, suitable for agricultural purposes?

25. COAL AND OTHER MINERAL PRODUCTS. — Has the country any known beds of stone coal; or of iron ores, or veins of lead, or copper ores, or any other valuable deposits of useful metals, or minerals? State localities and transmit, when opportunity offers, specimens.

26. WILD ANIMALS. — What is the general character and value of the animal productions of the district? What species of quadrupeds most abound? State their number and kind, and what effect the fur trade has had in diminishing the value of the country for the purposes of hunting. What kinds of animals decreased earliest, and what species still remain?

27. ANCIENT BONES. — Do the Indian traditions make any mention of larger, or gigantic animals in former periods? Is there any allusion to the mastodon, megalonyx, or any of the extinct races, whose tusks, or bones, naturalists find imbedded in clay, or submerged in morasses?

28. TRADITIONS OF THE MONSTER ERA. — What species are we to understand by the story, on this head, told to Mr. Jefferson, or by the names YA-GA-SHO, QUIS QUIS, WIN-DE-GO, BOSH-CA-DOSH, or others, which are heard in various dialects?

29. ANIMALS WHOSE FIGURES ARE MUCH USED AS THE CHIEF ARMORIAL MARKS OF TRIBES. — Have they any peculiar opinions, or striking traditions, respecting the serpent, wolf, turtle, grizzly bear, or eagle, whose devices are used as symbols on their arms, or dwellings, and how do such opinions influence their acts on meeting these species in the forest?

30. ERA OF THE IMPORTATION OF THE HORSE. — Have they any tradition respecting the first introduction of the horse, upon this continent, and from what qualities, or properties, do they name this animal?

31. CHARTS ON BARK, &C. — Are they expert in drawing maps or charts of the rivers, or sections of country, which they inhabit? State their capacities on this subject, denoting whether these rude drawings are accurate, and whether they evince any knowledge of the laws of proportion, and transmit, if you can, specimens of them.

ANTIQUITIES.

32. FIRST EPOCH OF MAN ON THE CONTINENT. — Are there any antique works, or remains of any kind, which are the result of human industry in ancient times, in your district? And what traditions, or opinions, have the tribes, on the subject?

33. MOUNDS, PYRAMIDS, TEOCALLI. — What is generally thought by men of reflection, to be the probable origin and purpose of the western mounds? Are they of one, or several kinds — of one, or several eras — and were they erected by one, or several nations, who lived, at various periods, in the country, at the same locations? Were they places of observation — of sacrifice, of burial, or of military defence? Is the mound *sui generis* with the Aztec or Toltec type of pyramids, or teocalli of the earlier periods? Were the later Indian structures in Mexico, improvements upon these rude earthen pyramids of the North, or did the knowledge of these more magnificent structures, or the power to construct them, degenerate in the more Northern latitudes of the continent, where the chase absorbed attention? State your views on this head, and give plans and descriptions of the mounds examined, carefully noting the bearings of the compass, the elevations of the mounds, and of the plains or hills on which they are based, their exact geometrical figure, and the relative position of the nearest rivers, or streams. State also, whether there be any ancient articles of sculpture of stone or shell, or any vases or other forms of pottery, from which the state of arts and character of the builders may be inferred; and what time has probably elapsed from an examination of the forest growth, since these structures were deserted.

34. ANCIENT FORTIFICATIONS OR MILITARY WORKS. — Has the progress of settlements west of the Alleghanies, and the felling of trees and clearing up of lands, disclosed any ancient embankments, ditches, or other works of earth, or stone, having the character of forts, or places of military defence? If so, note whether such works manifest in their structure, any of the modern or ancient principles of engineering. Are there any features resembling the Roman, Grecian, Carthaginian, or Libyan modes of circumvallation, or evidences of military art in the approach to fortified places before the discovery of gunpowder, and the invention of fire-arms? Are there any ancient missiles of stone, flint, chert, or other fossil and hard bodies, or adjunct antiquities which may throw light on the main subject? Describe accurately such works, and give therewith complete topographical sketches of the country, denoting the strength and importance of the supposed positions of defence. Observe also, whether there be anything answering to a horn-work, or redoubt, or any spring, or well, by which water could be supplied to a besieged place.

35. CIRCULAR WORKS. — Are there any circular, or ring-forts, and how do these differ, in the principles of defence they disclose, from the angular or irregular works? Were these forts circular parapets with wooden pickets — were they pierced for gate-ways? How were these gate-ways crowned and defended, and what are the characteristic features of this species of ancient earth-works?

36. IMITATIVE MOUNDS. — In examining the western mounds, are there any of an imitative, or allegorical character, or resembling an elk, serpent, deer, wolf, or other animate object in their shapes?

37. PROOFS OF ANTIQUE AGRICULTURE OR HORTICULTURE. — Does the level surface of the prairie country, which is now partially over-run by forest, preserve any traces of a plan or design as of ancient furrows or garden-beds, which appear to have been abandoned at a definite period?

38. OLD ARTIFICIAL LAND-MARKS, OR PSEUDO MONUMENTS. — Is there any ancient or noted mark on rocks, or any artificial orifice or excavation in the earth, or other land-mark known in local tradition, which denotes historical events?

39. ANTIQUE IMPLEMENTS AND VESSELS OF POTTERY. — What is the general character of the antique implements, ornaments, or utensils of earthenware found in your district of the country? If vases, kettles or pots, or other vessels of clay are found — of what kind — how were they formed, on a potter's wheel, or by hand — how were the materials compounded — was the ware burned completely or partially — was it glazed, or unglazed? Is it ornamented, and how? Does it resemble the ancient Etruscan ware, the terra-cotta, or any ancient rude form of earthenware. Transmit drawings and descriptions of each species of article illustrative of the potter's art.

40. PIPES. — If pipes are found, what is the material, is it stone, steatite, or clay — how are they formed — to admit a stem, or to be smoked without, and what are their shapes, sizes and ornaments?

41. UTENSILS OF STONE. — How many kinds were there? Describe them, and give figures. How was the axe usually formed, and from what materials? What was the shape and construction of the stone tomahawk? Was it always crescent-shaped, and pointed? What was the range of forms of the ancient implements for pounding corn, roots, and their rude bread-stuffs; and of their instruments for fleshing skins, and for removing charcoal from timber, &c., cut by the process of fire? Do these instruments denote a people advanced in the arts, or still in the rude state of mere hunters? Are there ornaments of bone, spar, gems, mica, copper, silver, gold, mosaic, or glass, denoting a higher degree of skill than the preceding; and are there any evidences, in the examination of this branch of antiquities, which prove the makers to have understood the mechanical processes of boring, turning, polishing, moulding, or making impressions in clay, or cutting hard substances?

42. MANUFACTURE OF DARTS, ARROW-POINTS AND OTHER MISSILES. — What was the process of manipulation of these, often delicately wrought, articles? What species of mineral bodies were chiefly used — and how was the cleavage of them effected? Did the art constitute a separate trade, or employment? If darts abound, what is the material and size? Do they differ much in size, and apparent object, some being for war and others for hunting; and are there any elongated in the shape of spear-heads, or javelins? How many species of darts, spears, &c., were there? Describe them and give figures of the size and descriptions of the uses of them.

43. DISTRIBUTION OF SEA-SHELLS INLAND. — What species of sea-shells have been found, in ancient graves, or mounds, at remote points from the ocean? At what localities, on the sea-coasts, do these species now abound, and do they furnish any light on the probable track of migration?

44. SHELL-COIN, WAMPUM, ANCIENT CURRENCY. — How many kinds of wampum were there? What shells were employed? What was the value of each kind? How was it estimated? *Vide* 61.

45. ANCIENT USE OF METALS. — Was iron, copper, tin, or any other metal used by the aboriginal tribes in America, for the purposes of art, prior to the discovery of the continent by Columbus? In the copper arm-bands or other implements, of old graves, are there any evidences of the arts of hammering, polishing, soldering, or engraving?

46. HIEROGLYPHICS, OR ANCIENT ALPHABETS. — Do the rocks of America, or any ancient architectural structures, disclose any ancient alphabet, hieroglyphics, or system of picture-writing, capable of interpretation, which promises to reflect light on the obscure periods of American history?

ASTRONOMY.

47. THE EARTH AND ITS MOTIONS. — What is the amount of their knowledge on this subject? Do they believe the Earth to be a plane, a globe, or a semi-circle? What relation does it bear, in their opinion, to the

sun and moon and planets? Do they believe the planets to be other worlds, which are inhabited by men? Some of their oral tales denote this. Extend the inquiry.

48. CREATION. — Have they any idea of the universe, or other creations in the field of space, which have in their belief been made by the Great Spirit?

49. THE SUN. — What is their opinion of the nature and motions of the sun? Do they believe it to be a place of fire? Can they be made to comprehend that the sun does not daily rise and set, and that this *apparent* motion arises from the diurnal revolution of the earth?

50. THE SKY, OR FIRMAMENT. — Why do we observe, in their picture-writings, the sky drawn in the form of a half circle, resting on the plane of its truncation? Do they believe the sky, or heavens, to be circumscribed by a material mass of some kind, having orifices, through which the stars and planets shine?

51. ECLIPSES. — How do they account for eclipses? Do they believe, as the Aztecs did, that they arise from the shadow of some other body interposed? What is implied by the term Gezis Nebo, or dead sun?

52. LENGTH OF THE YEAR. — How may moons, or months, compose the Indian year? Have they made any approach to the astronomical knowledge of the ancient Mexicans, who determined the length of the year at 365 days, 5 hours and 29 minutes? Have they made any attempt to compute a *solar* year? If, as has been said, the Indian year consists of thirteen moons of twenty-eight days each, their year would consist of 364 days. If of twelve moons of thirty days each, it would consist of 360 days. How far is either statement correct, or fanciful? Or have the Indians of these latitudes any definite or exact notions on the subject?

53. SOLSTICES. — Do they notice the length of the summer and winter solstices, and of the vernal and autumnal equinoxes?

54. CYCLES. — Have they a cycle of 52, 60 or 120 years, or of any fixed or stated length, at the end of which they believe, with the ancient Aztecs, that the world will come to a close; and do they believe that it is the power and efficacious supplications of the Indian priests to the Great Spirit that causes its renewal?

55. DIVISIONS OF TIME. — Have they any name for the *year*, as contradistinguished from a winter? Have they any division of time resembling a *week*? The Aztecs had a division or month of thirteen days, and a week of five days. Are there any analogous divisions among our Indians? Is the day divided into hours, or any other sub-portions of time?

56. NAMES FOR STARS. — Have they names for any considerable number of the stars? If so, which stars, and what names do they give them?

57. ASTROLOGY. — Have they anything resembling the ancient signs of the Zodiac? Do they attach personal or other influences to the stars? Is the moon thought to influence men, plants, or animals? Is corn planted at particular times of the moon's phases? What superstitious opinions are believed to affect its growth?

58. METEOROLOGICAL PHENOMENA. — What are their opinions of the Aurora Borealis? Have they any definite notions of the Milky Way? What is their theory of the origin and nature of clouds, rain, hail, and winds and tornadoes? What is thought of meteors? Have they formed any opinions of comets? Do they connect any superstitions with the phenomena of falling stars? How do they account for the rainbow?

59. ORIGIN OF ASTRONOMICAL OPINIONS. — Are there any coincidences with the oriental system of computing time? Have they any peculiar notions respecting the cardinal points? Are there any opinions expressed which may have been derived from any of the ancient and peculiar theories of cosmogony? Must we look to their fictitious tales and allegories for their notions on this and other abstruse subjects, respecting which they are unwilling, or unable, to communicate direct information?

60. INDIAN PARADISE.—In what part of the heavens, or the planetary system, do the Indians locate their paradise, or their happy hunting grounds, and land of souls?

ARITHMETIC.

61. NUMERATION.—Does the tribe count by decimals? Are there any tribes who use the ventigissimal system of the Aztecs? Do any of the tribes count by fives? How high can they, with exactitude, compute numbers? What are the Indian names of the digits? State them. State also, in what manner the computation is carried from 10 to 20, and what are the terms for each additional decimal up to 100? How is the process continued from 100 to 1,000, and to 10,000? Are the generic denominations carried on, with exactitude, to a million? Give the extent of their power of computation, with examples of their appreciation of high numbers.

62. COIN.—Was the wampum or any form of sea-shells, referred to in No. 44, anciently used, or is it now used, to represent numbers and value, and to constitute a standard of exchange? Had the tribe originally, or has it now, any thing whatever of the nature of a currency? If a grain of *seawan*, *peag*, or *wampum*, was the lowest fraction, of value, or unit, in computation, did not the decimal system mark accurately the entire scale, and denote accurately, by the addition or multiplication of decimals, the price of any commodity, up to hundreds, tens of hundreds, &c.? Do they understand federal money?

63. KEEPING ACCOUNTS.—How were accounts formerly kept? And how are they now kept? If the terms, *skin*, *plue*, and *abiminiqua*, or others, are employed in the interior trade as synonymous, and as the standard of value, in which accounts are kept, what is *the scale* of the computation? How are musk-rats and other smaller furs, for instance, computed into "skins" of the standard value? Are large beaver-skins, or skins above one pound weight, valued above a technical or standard *plue*, or skin? Are otter-skins, cross foxes, or any other skins, exempted from this rule? How are deer and buffalo skins valued?

64. PICTORIAL HELPS TO MEMORY.—Are signs, or pictorial devices, used to any extent, in keeping the accounts in commerce; or in denoting numbers in their pictorial records?

65. ELEMENTS OF FIGURES.—Did a single perpendicular stroke stand for 1, and each additional stroke mark the additional number? Are the ages of deceased persons or number of scalps taken by them, or war parties which they have headed, recorded on their grave-posts, by this system of strokes? Is the cross used, as it is said to be among some of the Algonquin tribes, to denote 40? Did the dot, or full comma, stand as a chronological sign for a day, or a moon or month or a year? Or was its meaning fixed by adjunct figures?

MEDICINE.

66. GENERAL PRACTICE.—What is the general character of their medical practice? Are they careful and tender of their sick, and is this attention more marked in relation to children and youth, than to the aged and decrepid?

67. ANATOMY.—Have their professed doctors and practitioners of medicine any exact knowledge of anatomy; of the theory of the circulation of the blood, or the pathology of diseases?

68. TREATMENT OF COMPLAINTS.—How do they treat fevers, pleurisy, consumption of the lungs, obstructions of the liver, deranged or impeded functions of the stomach, constipation, or any of the leading complaints?

69. MEDICINES.—What species of plants or other roots are employed as emetics, or cathartics? How are they prepared or applied? How are their medicines generally preserved from the effects of heat, or humidity?

70. DEPLETION.—Do they bleed in fevers? And what are the general principles of the application of the Indian lancet? Is the kind of cupping which they perform with the horn of the deer efficacious, and in what manner do they produce a vacuum?

71. Stoppage of Bleeding in Aneurisms or Cuts.—Have they any good styptics, or healing or drawing plasters? Are bandages and lints skilfully applied, and timely replaced, or removed?

72. Healing Art.—Is the known success with which they treat gun-shot wounds, cuts, or stabs, the result of the particular mode of treatment, or of the assiduity and care of the physicians?

73. Amputation.—Do they ever amputate a limb, and how, and with what success? Are the arteries previously compressed? Have they any surgical instruments? Are they skilful in the use of splints, and the necessary supports to the injured limb? What mechanical contrivances have they for removing the sick, wounded, or maimed, from the woods, or in their lodges?

74. Theory of Diseases and their Remedy.—What is the state of the Indian materia medica? Have they any efficacious remedies for female complaints? Do they employ, understandingly, any metallic medicine? Do they understand the nature of an oxyde? Are their compound decoctions made with such knowledge of the principles of combination, or admixture, as to insure their efficacy? State what is known of their medicines, elementary or compound, and the theory of diseases.

75. Vapor Baths, Paralysis, &c.—How do they treat imposthumes, and eruptions of the skin? What is the cause of their known and general failure to treat small-pox, or varioloid? Do men ever interpose their skill in difficult cases of parturition; and what is the general character of the medical treatment of mothers and children? Have they any treatment for paralysis? Do they employ vapor baths efficaciously for the health of their patients?

TRIBAL ORGANIZATION AND GOVERNMENT.

76. Internal Constitution of Tribe.—Does the tribe consist of one or more clans, or sub-divisions? Are the rights of the clans clearly defined, and what are the general principles of the organization and government of the tribe? Is it organized on the *totemic* system, that is to say, is it divided into separate clans, or classes, bearing the name of some bird, quadruped, or other object in the animate or inanimate kingdoms? If so, of how many clans, or totemic classes or bands, did it originally consist? How many does it now consist of, and what is their present relative strength? State the name of each clan, or sub-division, with its signification and origin.

77. Object or Utility of Divisions into Clans.—What is the apparent object of these devices, where they exist? Are they indicative of the original families or distinguished chiefs of the tribe? Are they a sign of kindred? If they denote original consanguinity in the individuals of the bands or tribes, bearing these marks, or devices, what is the degree of the affinity, past or present? If they denote primary families, or chiefs, were these devices their *names?* Is there any pre-eminence in the clans? Are the turtle, wolf, and bear clans, as it has been said, more honorable than others? Is each clan entitled to one or more chiefs? And if not thus organized, what other principles of division, or association, or distinction, exist?

78. Chieftainships—their Tenure.—Were the chiefs originally hereditary or elective? If hereditary, is the descent in the male or female line? If in the female line, as among the Iroquois, how can the son of a chief become the official successor of his father?

79. What are the General Powers of the Chiefs in Council?—To what extent is an Indian Council a representative assembly of the tribe, and how far are the chiefs invested with authority to act for the mass of the tribe? What invests their verbal summons, or decision, with a binding force? How is their authority derived? Is this authority tacitly committed to them, as a common and general function of their office as chiefs or sachems, or is it delegated by the mass of the tribe for each particular occasion? Or are they open, at all times, to popular opinion, and the mere exponents of it?

80. If the Chiefs be elective, is there anything beyond the tacit Election of Popular Opinion?—If elected by their distinguished deeds, does the tenure of their office continue beyond the continu-

ance of such deeds? If hereditary, have the rights of the chieftainship any force beyond the continued ability or capacity of the incumbent, or his descendant, to execute or obey the popular will? Whether, therefore, they be elective, or hereditary, is not the disapproval of the mass, or body of warriors, an effective bar to the exercise of their powers and functions?

81. Is the Democratic Element strongly Implanted?—Do the chiefs, in public council, speak the opinions and sentiments of the warrior class, previously expressed by the latter in their separate or home councils; or do they particularly consult the old men, priests, warriors, and young men composing the tribe? Are they much subject to be influenced by extraneous opinions? Do they pursue their interests with shrewdness and intensity? Is their right to sit in council ever exercised in a manner which is equivalent to giving a *vote*? Are persons for and against a proposition counted, and if so, by whom? If votes are given, is this a modern or an ancient exercise of power, and has it resulted in giving more certainty and satisfaction in decisions? Are any powers in fact exercised by the chiefs in advance of public opinion in the tribe?

82. What Principles govern the Ultimate Decisions of a Public Council?—In what manner are the deliberations opened, conducted and closed? Is there much respect to the ancient ceremonies? Is the weather regarded? Are there any official personages who exercise duties equivalent to a crier, secretary, or other legislative or legal functionary? Are questions deliberately considered, or decided off-hand? Are decisions made on the principle of majorities, or pluralities? Were they originally or are they now, required to be made, in any case, on the principle of absolute unanimity? Or is the voice of a leading chief taken as the expression of the will of the tribe?

83. What is the Scope of the Civil Jurisdiction and the Order of Succession of the Chiefs, as Magistrates?—Are decisions, made by single chiefs, or by a body of chiefs in council, carried implicitly into effect? If a man have forfeited his life, and the question be decided in a council of chiefs, is an executioner appointed? If so, does he use a tomahawk, or club, or arrow? Is the time, and mode, and place, decided by the chief, or council, or left to the executioner, as it was in the case of Myontonimo? Are the results of questions of the restoration of property communicated to the parties at once, or sent by a messenger?

84. How are Rank and Succession in Office Regulated?—Is the succession of a chief to an office vacated by death, or otherwise, debated and decided in council, or may a person legally, in the right line of descent, forthwith assume the functions of the office? Are new chiefs created by election, and how? May a chief be deposed from his office, and for what offence? Is the custom of wearing medals to mark the distinction of office, an ancient or a modern one? How many chiefs has the tribe, and how many has each clan composing it?

85. What is the Power of the Priesthood, as an Element in the Decision of Political Questions?—Do they constitute a distinct power in the government? If so, do they exercise this power by sitting in council, or in other modes? Are they, in fact, counsellors, and what influence do they exercise in questions of war or peace, the advance or retreat of a war party, or the the sale and cession of land?

86. Define the Power of the War Chiefs?—Does their power come in as an element in the political organization of the council, or in the exercise of the civil power of the village chiefs or magistrates, in cases where both powers are not concentrated in the same hands? Are the powers of a war and a civil chief often united in the same person? If the war chiefs be exclusively designated by the popular voice among the warrior class, at what age can a voice in their favor be exercised? Is there any limit, or time, when a young man may appropriately express his opinion?

87. What are the Rights of the Matrons in Council?—May this right be exercised for any purpose but that of peace? Are they permitted, as in the ancient institutions of the Iroquois, to a separate seat in Council? And have they, as in that nation, a prescriptive right of being heard by an official person, who bears the character of a messenger from the women? State the general impression with respect to the political power of the matrons in the tribe, and inquire whether the widows of distinguished chiefs, or of those of acknowledged wisdom, are ever admitted to sit in council?

88. WHO HAS A RIGHT TO CALL GENERAL COUNCILS? WHAT TRIBE? — Are there, among the various tribes, any who possess the power to summon such councils, as a prescriptive right? If so, designate them, and state the extent of this right, the supposed occasion or era of its origin, and the general nature of the subjects that may be brought before them. Are such rights to be regarded as vestiges of ancient confederacies, or the result of causes which have been in operation only since the discovery of the continent? What occasions of such general councils can be referred to? In the Wyandot tribe, and in the Delaware tribe, what are the grounds of the ancient right formerly or at present claimed, in this respect, by each? And in what manner did the growing Iroquois supremacy operate to interfere with, or break down, this right, or render nugatory its exercise?

89. PRIVATE RIGHT TO TAKE LIFE, OR LAW OF RETALIATION. STATE IT. — How is this right exercised — is it with or without the assent of the chief presiding over the village, or band? And when does the right stop? Is it terminated at one, two, three, or more repetitions of its exercise? If there be no male next of kin in a direct line, or of the same *totem*, to the person murdered, may the right be exercised by collateral branches, and to what extent? Is the right to take life for life, in any case, compromised by accepting presents? What is the usual amount? Does it depend upon the means or ability of the person who is to suffer the penalty of the law of retaliation, or on those of his friends? Does the intervention of a long time, and the fleeing of the murderer, generally allay resentment, and lead to negotiations for compromises? What period is sufficient for this change of feeling, and spirit of compromise? Are efforts for this purpose often utterly rejected? Is there any recognized principle of escape, or place of retreat, analogous to a town, or place of refuge, as among certain of the Shemitic tribes? Are females, in cases of deaths from the feuds of polygamy, &c., vindicated? Are their lives estimated as high as those of males? Are questions of Indian debts due to traders commonly brought before the chiefs, to be settled, or adjusted; and have the chiefs, or people, who are committed to your official charge as an agent, sufficient knowledge of the power of numbers to enable them to act with prudence? Is a message accompanied with wampum, &c., invested with anything like the equivalent authority of a *legal summons*, in cases of private disputes, or controversies?

90. GAME LAWS, OR RIGHTS OF THE CHASE. WHAT ARE THESE? — Has each family of the tribe a certain tract of country, within the circle of which, it is understood and conceded, that the head or members of this family have a particular or exclusive right to hunt? Are intrusions on this tract the cause of disputes and bloodshed?

91. TRESPASSES ON THE PRESCRIBED BOUNDARIES. — Are furs thus surreptitiously hunted, on another man's limits, subject to be seized by the party aggrieved? If such a cause of quarrel be brought before the chiefs, or wise men, is the right awarded according to a fixed rule and understanding, respecting the parcelling out, into families, of all the hunting grounds of the tribe?

92. NOTICES OF LOCAL INTRUSIONS. — Are warnings of such intrusions frequently given? Or is injury to property redressed, privately, like injury to life? Is a forfeit of life often the result of continued intrusions? Or is seizure of the furs hunted deemed sufficient?

93. RULES OF HUNTING, AND DIVISION OF GAME. — If hunting parties or companions agree to hunt together, for a special time, or for the season, what are the usual laws, or customs, regulating the hunt? If one person start an animal, and wound it, and another pursue and kill it, how is the meat divided? Is the game equally divided? Does each retain the skins and furs of the animals actually killed by him? What is done in cases of thefts from traps?

94. DISPUTE BETWEEN TRIBES. — If a tribe, or band, pass over the lines and hunt on the lands of another tribe, and kill game there, is it deemed a just cause of war? Do messages pass, in the first place, between the chiefs; and is there a spirit of comity, and diplomacy exercised?

INDIAN TRADE.

95. WHAT ARE THE PRINCIPAL FACTS, NECESSARY TO BE KNOWN, TO REGULATE THE INDIAN TRADE AND COMMERCE, AND TO PRESERVE PEACEFUL RELATIONS ON THE FRONTIERS? — Has commercial

intercourse promoted the general cause of Indian civilization? How is the traffic in furs and skins conducted, throughout its operations? What are its general principles — the place of outfit and supply — the place of exchange, the difficulties and risk attending it, and the general chances of profit and loss?

96. CAPACITY AND FIDELITY OF THE INDIANS, AS CUSTOMERS. — Are the chiefs and hunters shrewd, cautious and exact in their dealings, making their purchases with judgment, and paying up their debts faithfully? Are they moral, sober, and discreet? Do they rely on memory wholly, in keeping the sum of their indebtedness, and the number of skins paid, or are they aided by hieroglyphics, or devices of any kind, on the clerk's blotter, or in any other manner? Are they exact herein? If not successful, at the first or second hunt, or but partially so, are the credits required to be renewed? Are they freely renewed?

97. NECESSITY OF THE TRADERS TO LOOK AFTER THEIR CREDITS, AND THEIR LIABILITY TO LOSS FROM FLUCTUATIONS OF CLIMATE. — Is it necessary for the trader to send runners to the Indian hunters' camps, or private lodges, to collect their debts? Are these runners faithful, honest men? Is the result of unsuccessful, or deficient hunts, often caused by the migration, to other parts of the country, of some of the furred animals relied on, owing to excessive local dryness, or redundant moisture of the season? Do losses flow from these causes?

98. RATES OF BARTER — PERMANENCY OR VALUE OF DEBT, AND TAX OF LOCAL RESIDENCE. — Is the tariff of exchanges such as, generally, to protect the trader from loss? Is it just and fair? At what period after the credits are given, is an Indian debt deemed *bad* or *lost?* Are they bad at two years? Are the traders who conduct the interior exchanges, subject to onerous calls on their charity, or hospitable feelings, by sickness, or suffering, in the villages adjacent to their trading houses? And if so, does this circumstance come in, as a just element, in summing up the results of a series of years' trade, with the tribe?

99. WHAT HAVE BEEN THE LEADING EFFECTS OF THE DISCOVERY ON THE HUNTER PERIOD? — Have the purposes of commerce, since the discovery of the continent, had the effect to stimulate the hunters to increased exertions, and thus to hasten the diminution, or destruction of the races of animals whose furs are sought?

100. DIMINUTION OF ANIMALS. — Have the different races of animals declined rapidly since the prosecution of the trade? What animals flee first, or diminish in the highest ratio, on the opening of a new district of the remote forest, to trade? Is the buffalo first to flee? Is the beaver next?

101. REFUSE HUNTING GROUNDS. — Are the lands, when denuded of furs, of comparatively little value to the Indians, while they remain in the hunter state? Is not the sale of such hunted lands beneficial to them?

102. AREA REQUIRED TO SUBSIST A HUNTER. — What quantity of territory is required to be kept in its wilderness state, in order to afford a sufficient number of wild animals to sustain an Indian family?

103. QUESTION OF THE ULTIMATE EFFECTS OF THE FAILURE OF GAME ON THE RACE. — If the diminution or failure of wild animals lead the native tribes to turn their industry to agriculture, is not the pressure of commerce on the boundaries of hunting an efficient cause in the progress of Indian civilization? Has not the introduction of heavy and coarse woollen goods, in place of valuable furs and skins, as articles of clothing, increased the means of subsistence of the native tribes?

104. MORAL CONSEQUENCES OF CIVILIZED INTERCOURSE. — What evil effects, of a moral character, have resulted from the progress of the Indian trade? Has not the traffic in ardent spirits been by far the most fruitful, general and appalling cause of the depopulation of the tribes? How has the introduction of gunpowder and fire-arms affected the principles of the trade, and what has been the general influence of this new element of destruction, on their history and civilization? Have internal wars or peace been promoted thereby? What has been the prominent cause of discord on the frontiers, arising from the transactions of trade and commerce? Finally, can this trade be placed on better principles, and what are they?

105. PROBLEM OF THEIR CIVILIZATION. — Are there any serious or valid objections, on the part of the Indians, to the introduction of schools, agriculture, the mechanic arts or Christianity? If so, state them. Specify the objections — examine their bearings, and state the results which are reached by your best observation, reflection, and judgment.

LEGISLATION OF CONGRESS.

106. WHAT IMPROVEMENTS CAN YOU SUGGEST IN THE EXISTING INTERCOURSE LAWS OF THE UNITED STATES AS LAST REVISED, WITH THE INDIAN TRIBES? — Are these laws efficient in removing causes of discord, and preserving peace between the advanced bodies of emigrants or settlers on the frontiers, and the Indian tribes? Do they provide for difficulties between tribe and tribe? Is this at all practicable?

107. SOURCES OF DISCORD. — Whence do causes of difficulties and war usually arise, and how are they best prevented?

108. RIGHTS OF THE INDIANS. — What provisions of existing laws appear susceptible, in your opinion, of amendment, in order to secure more effectually the rights or welfare of the Indians?

109. FISCAL MEANS. — Could important objects be secured by the introduction of any modifications of the provisions respecting the payment or distribution of annuities, the subsistence of assembled bodies of Indians, or the investment or application of the treaty funds?

110. CHANGE OF LOCATION. — Is there any feature in the present laws which could be adapted more exactly to their present location, or to the advanced or altered state of society at present existing in the tribe?

111. ALCOHOLIC DRINK. — What provisions would tend more effectually to shield the tribes from the introduction of ardent spirits into their territories, and from the pressure of lawless or illicit traffic?

112. TREATY SYSTEM. — Is there any feature in the present system of negotiation with the tribes susceptible of amendment and improvement? Can the tribes, at this particular phasis of our settlements, and with their present increased means, and the consequent temptations to frontier cupidity, be as well negotiated with, in the forest, where all the means of improper influence are in full force, as they could be at the seat of Government? Are not the expenses of the subsistence of masses of men, women and children, at remote points on the frontier, unavoidably heavy? Does not an actual intercourse with the Executive Head of the Government, tend to give the tribes better views of its character and influence?

113. CAN THE TRIBAL RIGHTS OF THE INDIANS BE BETTER PROTECTED, AND THE TRIBE BE INCITED TO HIGHER EFFORTS IN CIVILIZATION? — Are the game, and wood and timber of the tribes subject to unnecessary or injurious curtailment or trespass from the intrusion of emigrating bands abiding for long periods on their territories? Are there complaints of any such trespasses?

114. THEIR ULTIMATE INDEPENDENCE. — Are any of the tribes in your district sufficiently advanced to have their funds paid to a treasurer of the tribe, to be kept by him, and disbursed agreeably to the laws of their local legislature?

115. QUESTIONS STILL BEARING ON THE LESS ADVANCED TRIBES. — Are payments of annuities to chiefs, or to separate heads of families, most beneficial? Should the principal of an Indian fund be paid in annuities to Indians at the present period, under any circumstances; and, if so, under what circumstances? Are members of the tribe generally capable of the wise or prudent application of money?

NEW INDIAN GOVERNMENTS WEST OF THE MISSISSIPPI.

116. WHAT ARE THE DISTINCTIVE PRINCIPLES OF THE GOVERNMENTS ASSUMED, OF LATE YEARS, BY THE MORE ADVANCED OF THE SEMI-CIVILIZED TRIBES WEST OF THE MISSISSIPPI? — How is the

elective franchise expressed and guarded? In giving a vote, are there any qualifications required by their laws as to property, the rendition of prior public services, or any prescribed condition of the voter arising from other pre-determined general causes? What individual rights are surrendered, in these schemes of government, to the central or governing power, as a boon or equivalent for the general security of life, liberty, and property?

117. How do these Nascent Governments Practically Work, and what has been their Progress?—Have original defects been remedied by adapting them more exactly to the genius and character of the people than they were, apparently, in the first rough drafts? What has been the progress in establishing a judiciary, and in the development of their national resources by wise and well-guarded laws?

118. What is the Present State and Future Prospects of these Governments?—Have the legislative assemblies adopted a practical system of laws for the enforcement of public order, the trial of public offences, the collection of debts, the raising of revenue, the erection of public buildings and ferries, school-houses and churches, or the promotion of education, the support of Christianity, and the general advancement of virtue, temperance, and the public welfare? Has this new phasis of these ancient communities had the effect to amalgamate the ancient clanships and sectional divisions, so far as these were founded thereon, or to obliterate them, together with their traditions—to dispel superstition, and ameliorate, in any marked degree, the condition of society in its humbler walks, and throughout the general mass? State the present condition of the tribes which have established these governments, the difficulties yet to be surmounted, and the probable progress which they may be expected to make.

PROPERTY.

119. What Ideas have the Indians of Property?—How do they believe *private rights* accrued? Have they any true views of the legal idea of property? Are they capable of clear and exact considerations of this character? In what manner do they suppose that property in things was first acquired by man? If possession gave this right, did the right continue, as long as the possessor was able to defend it? If the starting and pursuit of a deer gave a man a right to it, was this right affected by another's killing it? Did building a wigwam, or planting corn on a vacant, or distant part, of another tribes' territory, make the land his? And if so, how many years must it be held undisputed, to make the right valid? An Indian of the British dominions applied to an Indian Agent of the United States some years ago, for the allowance and payment by the United States of a private debt contracted in, and by a North Briton, resident in Hudson's Bay. How did the mind operate in this case, and how does it operate generally, in tracing the claim of right and title in property, and of obligation in the affairs of debtor and creditor? Endeavor to trace the process of individuality in rights and property.

120. How did Title originally accrue to Territory?—Was the right of a nation to the tract of country originally possessed by it, acquired by its occupancy of it by them, to the exclusion of all others? Did the Great Spirit make a gift of it to them, and why to them alone? If he gave to each tribe a portion of the country, and thus parcelled out the whole continent, and gave them, at the same time, a right to defend it, who gave one nation a right to invade the territories of another, for the purpose of dispossessing them? How can they justify this? If the Indians have no clear or fixed views on the subject, it will be sufficient to state the fact; if they, on the contrary, evince exactitude, pursue it, and illustrate the topic.

121. Are there any Traces of the Law of Primogeniture?—Is the descent of property fixed? Is the eldest son entitled to any greater rights, or larger share of property, than the other children? Does a parent express his will, or wishes, before death, as a descendant of Uncas did, how his property should be disposed of? Does a chief designate which of his children is to wear his medal; or is there ever made a legacy of a choice gun, an ornamented tomahawk, or other article? State the general usage of parents, and of chiefs, on this head.

122. What are the Obligations felt by the Indians to pay Debts?—Does time greatly diminish, in their view, these obligations, and how? Does the Indian fancy that ill luck in hunting, is a dispensation from the Great Spirit, and that he is exonerated thereby from the obligation? Are the Indians

prone to sink individuality in their debts, after a time, into nationality, and to seek to provide for them in that manner? Is the tribe punctual in the payment of their debts, and what is their general character on this subject? Do they set a high value on real property, exacting for it its real worth, or do they part with it readily, and for small and inadequate sums? Do they ever make more than one conveyance of such property, and are the questions of decision arising therefrom often complex and difficult?

CRIME.

123. WHAT CONSTITUTES CRIME?—Has man a right to take his fellow's blood? Is the taking of life an offence to the individual murdered, or to the Great Spirit who gave him his life? In the estimation of the Indians, did the Great Spirit, in forming the world and placing mankind upon it, give all an equal right to life; and if so, was not murder, from the beginning, a very great crime? If a crime, can the spirit of a hunter or a warrior, in their view, go to the Indian paradise, without satisfying the justice of the Great Spirit? How can this be done? Does the law of retaliation (*vide* 89) please or satisfy the Great Spirit? Can one, or two, or three murders expiate the crime of an original murder? Do they not make the offence to the Great Spirit the greater? State the common notions of the Indians on this point, and endeavor to learn whether they believe at all in punishments after death.

124. CAN THE DEITY BE OFFENDED?—Is a man under high obligations, by the fact of his creation, to worship the Great Spirit? And if he is, and yet he do not worship him, has he thereby committed a crime? What crime? Will the Great Spirit remember it, and how is it to be expiated?

125. WHY IS FALSEHOOD A MORAL OFFENCE?—Is it because the Great Spirit abhors it, or because injuries may result to man? If the Great Spirit abhors a lie, how can he excuse it? Has he not a character to reward truth, and to punish falsehood?

126. IS THE WANT OF VENERATION IN THE INDIANS A CRIME?—Are greater veneration and respect paid to parents than to brothers and sisters? Is an Indian priest, or a chief, more venerated than a common man? Is age, under any circumstances, the object of veneration? Is it a crime to strike a parent, as it was in the Jewish tribes? Is there any known instance of such an offence? Is it punishable, and how? Did the Indians ever kill by stoning a person?

127. WHAT CAN THE SAGES AND WISE MEN OF THE TRIBE SAY IN DEFENCE OF THE INDIAN CODE, DOING LIKE FOR LIKE?—If a bad deed is returned for a bad deed, is the Great Spirit pleased, or satisfied thereby? Try to arouse a moral sensitiveness on this point, in order to bring out their reasons, if any they have, for crimes against humanity, good neighborhood, property, chastity, &c.

RELIGION.

128. DO THEY BELIEVE THAT THERE IS A DEITY PERVADING THE UNIVERSE, WHO IS THE MAKER OF ALL THINGS?—What ideas do they possess of the Great Spirit? Is he believed to be self-existent, eternal, omnipresent, omniscient, omnipotent, and invisible? When the Great Spirit made the earth, and furnished it with animals and men, did he, according to their traditions, give man power over the animal creation, and did he, by any messenger or angel, or priest, give to man any definite rights, message or moral rules or laws, to be kept? If so, what rules of life did he give? Do they believe that they are responsible, to keep these laws or rules, and if so, why?

129. IS THE GREAT SPIRIT, OR DEITY, REVEALED IN THE PHYSICAL CHARACTER OF THE EARTH?—How does he manifest his presence on the earth, or in the sky? In what forms is he recognised? Is thunder considered his voice? Are storms regarded as his acts? Are cataracts evidences of his power?

130. WHAT ARE THE MORAL PRINCIPLES OF HIS GOVERNMENT, AND HOW ARE THESE PRINCIPLES MADE KNOWN TO THEM?—Is death the act of the Great Spirit? Do war and peace happen according to his

will? Is he the author of evil in the world, and what object did he, in their opinion, purpose to accomplish thereby? Do they believe, with the Wyandots, that the Great Spirit created two great personages, subordinate to himself, with general powers in the world, called *Good* and *Evil*, and set them in perpetual opposition?* Have these prime spirits, lesser spirits of benign or malignant character, who are subject, respectively, to them? Did the Great Spirit create the great Evil Spirit, as he is generally called, and make him subject to himself, or is this malignant spirit, so universally feared by the Indians, of an independent nature, and may he be worshipped? If he is not independent in his existence and attributes, how do they expect to escape the displeasure of the Great Spirit, for offering sacrifices and worship to so evil a being? Do they indeed worship the Evil Spirit? Is not taking another person's goods, or denying the truth, or doing any act of wrong or unkindness between man and man, displeasing to the Great Spirit? And a proof of obeying the voice of his evil adversary? How do they excuse this?

131. How are they excused for Offences against the Great Spirit?—Is there any provision, in their religious system, by the intervention of their priests, or sacrifices, or fasts, or in any way whatever, by which cases of disrespect, or neglect of the Great Spirit, can, in their belief, be excused or pardoned? Are hunger, cold, or human sufferings of any kind, satisfactory and acceptable, as some of them believe, for offences against the Deity?

132. Are the Indian Sacrifices Compensations for Evil Deeds?—Have they any idea whatever of an atonement, or a belief or expectation that some great personage was to come on earth, and answer for them, to the Great Spirit; and if not, is such an idea readily explained, and made reasonable to them? What do the missionaries report on this subject? Can they discern in their rites, or mythology, any name, or feature, having allusion to the atonement, and thus denoting their connection with nations of the Shemitic stock, who embraced this idea prior or subsequent to the opening of the Christian era? Do they sacrifice animals to appease the *justice*, or to acknowledge the *goodness* of the Great Spirit? Did they or their ancestors ever offer *human* sacrifices, as it is known that the Aztecs of Mexico did? Were prisoners—who were burned at the stake by the North American Indians—offered only to satisfy the spirit of vengeance, or to gratify the thirst of warlike glory? Is it *certain* that there was *no* religious rite, or feeling, mingled with these barbarities? What is the latest period of such practices? Are not sacrifices of female prisoners now made by the Pawnees, and some of the Upper Missouri tribes, to a divinity analogous to Ceres, or the supposed goddess of corn?

133. What is the Moral Character of the Indian Priesthood?—Are they virtuous, sober, truthful, or ascetic? Do they bear any badge of their office? How many different classes of priests, or prophets, are there in the tribe? What are their names, and in what manner and with what ceremonies do they exercise their several powers? Are these priests hereditary, or may any person assume the functions? Are the offices confined to males, or may they be assumed by females? Do they affect to reveal future events; to direct where lost articles may be found; to bring down a blessing, or invoke a curse from the Great Spirit? Have the tribe, or the pagan or unconverted portions of it, general confidence in their power? When an Indian dies, does an Indian priest attend his sick bed, or his funeral? For what purpose does he attend? What office, or functions does he perform? Does he make an address, or anything resembling a prayer? If the man dies, who draws the devices on his grave-post? Give specimens of such devices or inscriptions, if in your power, with their interpretation. What, in the Algonquin tribes, is a Jossakeed, a Meda, and a Wabeno?

134. What General Beliefs and Superstitions prevail?—Are there some points in which all agree? Do they believe in angels, or special messengers of the Great Spirit? Are guardian spirits supposed to have the power of shielding individuals from the power of evil? Is there a supposed class of spirits, or agents, who can assume the forms of animals or men, and who have the power of thwarting the will of the Great Spirit? Does the evil spirit thwart his will?

135. Necromancers and Sorcerers.—Have they a class of persons, who affect to wield the power of necromancy or sorcery? Do they affect to remove diseases, or to inflict them? Do they believe in witchcraft?

* This, it will be recollected, was the belief of Zoroaster and his followers.

Are witches and wizards supposed to have the power of transforming themselves into other shapes? What is the theory on this subject? Do witches or wizards invariably exercise their powers for evil and not for good purposes? Have persons accused of those acts been burned? When were the last executions for this offence made? Did Tecumthe avail himself of this superstition to remove rivals from the Indian nations; did he condemn the noted chief Tarhe?

136. VARIOUS BELIEFS, PARTLY OF ORIENTAL, AND PARTLY OF WESTERN ORIGIN.—Do they believe in vampyres or in premonitions from the dead, or in the theory of ghosts? Do they trust in charms and amulets? What is the Indian theory of dreams? Are dreams regarded as revelations of the divine will? Do they exercise much influence over the practical affairs of the Indian life? Are good dreams courted under the influence of abstinence? Are guardian spirits selected under the like influences? Are they prone to regard themselves as doomed, or spell-cast? Are they easily alarmed by omens?

137. WHAT IS THE ACTUAL CHARACTER OF THEIR WORSHIP WHEN CLOSELY ANALYZED?—What species or degree of worship do they, *in fine*, render to the Great Spirit? Do they praise him, in hymns, chants, or chorusses? Do they pray to him, and if so, for what purpose? Is it for success in hunting, war, or any other avocation of life? Give, if you can, a specimen of their prayers.

138. RITES OF FASTING AND FEASTING.—Do they fast that they may acquire mental purity, or cleanliness to commune with him? Are the general feasts at the coming in of the new corn, and at the commencement of the general fall hunts, of a religious character? Are these feasts of the nature of *thanksgivings?* Are any of the chorusses, or songs of the priests, sacred, or of hieratic character? Is the flesh of the bear, or dog, which is sacrificed, used to propitiate his favor? Is it true, that *all* the flesh, bones, and the "purtenance" of the animals sacrificed in the feast, must be eaten, or burned, as in the institution of the paschal supper?

139. SACRED CHARACTER OF TOBACCO.—Are the leaves of the tobacco plant, which are cast on the waters or burned in the pipe, offered as sacrifices to the Great Spirit?

140. HAVE YOU OBSERVED ANY TRACES OF THE GHEBIR WORSHIP, OR THE IDEA OF AN ETERNAL FIRE?—It is seen in their pictorial scrolls of bark, that they draw the figure of the *sun* to represent the Great Spirit. Is the sun the common symbol of the Great Spirit? Do they now, or did their ancestors, worship him, through this symbol? It is stated by General Cass, after visiting the Indian tribes in the north-west, in 1820, that there formerly existed an order of men, whose duty it was to keep alive an "eternal fire." Is there anything of this nature now existing, or known in the traditions of the tribes best known to you? The French described the Natchez as sun-worshippers. State the traditions and existing opinions of the Indians on this topic.

141. WHAT ARE THE NOTIONS OF THE TRIBE ON THE NATURE AND SUBSTANCE OF FIRE, OR CALORIC?—Is fire obtained from the flint, or from percussion, deemed more sacred than from other sources? Is this the reason why councils are opened for public business, among the far tribes, with fire thus obtained? Is there in this custom of burning tobacco with fire so obtained, accompanied by gesticulations to the Great Spirit, any vestige or evidence of the ancient prevalence of fire-worship among the North American tribes? Are there any other evidences of the estimation of fire known to you, which denote the former prevalence of such worship, in the latitudes of this continent north of the ancient Aztec empire of Mexico?

142. IDEA OF A HOLY FIRE.—Did the Indian priests, at former periods, annually, or at any set time, direct the fire to be extinguished in the Indian lodges, and ashes cast about to desecrate them, that they might furnish the people new and sacred fire to re-light them?

143. WHAT NOTIONS HAVE THEY OF THE PLANETARY SYSTEM?—In speaking of the moon, as some of the tribes have, as being the consort of the sun, do they regard it as the shadow or effusion of the sun, or as deriving its light therefrom? Are the stars or planets regarded as parts of a system? Are they supposed to be occupied by the souls of men? State their ideas of the planets, generally, in connection with number 47.

144. How do Signs Affect Them?—Do omens and prognostications exercise a strong sway over the Indian mind? Do they ever influence councils in their deliberations, or war-parties on their march? Are predictions, drawn from the flight of birds, much relied on? Are auguries ever drawn from the sombre hue, shape or motions of the clouds?

145. Is there Reason to Believe the Indians to be Idolators?—Are images of wood or stone ever worshipped? or is there any gross and palpable form of idolatry in the existing tribes, similar to that of the oriental world? What superstition or purpose is denoted by setting up water-worn-stones, or boulders, resembling images, on the shores of the rivers and lakes? What objects are enclosed in the arcanum of the medicine-sack? Has this sack, or secret depository of sacred things, any of the characters of "an ark," which have been attributed to it by writers? What deductions are to be drawn from idols which have been discovered?

146. Immortality.—Do they believe in the immortality of the soul, and the doctrine of moral accountability to the Creator? Do they believe in the resurrection of the body? A conception has appeared in the traditions of the Chippewa tribe, of the existence of duplicate souls, as if there were one soul of the body and another of the mind. Are there any traces of such a belief of the tribe, whose customs you are acquainted with? Do they believe, at all, in the doctrine of rewards and punishments in a future state? Do they represent the future and unknown state, as, in fact, a phantasmagoria, or shadowy image of the present world—its topography, and its productions and enjoyments? Is the crossing of a deep stream, in the fancied journey of the soul to the land of bliss, as believed by some of the Algonquin tribes, an allegorical representation of future punishments for acts done in this life? Is this a partial or general belief?

147. What is the Common Notion of the Indian Paradise?—Do the virtuous and the vicious alike, expect to enjoy its fruitions? By taking the idea of evil, suffering, or punishment from its precincts of expected bliss, do the Indians not reproduce, on the western continent, the exact counterpart of the Mahomedan or oriental paradise? Are there any deaths in the Indian paradise? Or is it a final state? Will there be any giants or enchanters there? Will there be any wars?

148. Is there not a Perversion of the Doctrine of Immortality respecting the Brute Creation?—Do the Indians believe in the resurrection of animals? Do they believe that the Great Spirit has given the brute creation *souls* and *reasoning powers*, as well as man? An Indian, in 1820, begged pardon of a bear, whom he had shot on the shores of Lake Superior. Did this imply that he was to encounter him, as an immortal being, in another life?

149. What Peculiar Societies characterize Indian Life?—Are these societies bound by the obligation of secrecy? What secret rites exist? Do they partake of a religious, festive, or other character? What knowledge do they profess to cultivate? Among the tribes of Algonquin origin, there are separate institutions or fraternities, called the Wabeno and the Medawin societies. Is there any extension of these societies, or are there similar fraternities in the tribes you are conversant with? If so, describe them, with their origin and rites, the ties which bind them together, and the object of each, and the influence it exerts. Is the knowledge and practice of medicine confined to the members or professors of these societies? Are they, in any marked manner, the depositories of the traditions of the tribe, or of any department of aboriginal knowledge? Are the members of these societies, more than the uninitiated, skilled in the art of drawing devices, or in the keeping of their mnemonic songs? An opinion was expressed by the late Governor De Witt Clinton, that there was, among the Iroquois, some ancient tie, or sign of fraternity and recognition, resembling the Masonic tie. Is there any sign or evidence of such a rite observable in the customs of the tribe known to you?

MYTHOLOGY.

150. What Peculiar Myths have the Tribe?—Do they believe that the great spirit of evil manifests himself on the earth, in the form of the serpent? Are the rattlesnake, and other venomous species,

more than others, invested with fearful powers? Do the priests sometimes put these into their drums? Is the respect and veneration paid to serpents, the true cause of their lives being spared when encountered in the forest? Do they offer tobacco to appease the spirit of the snake? What theory does this imply? Can the species send disease? Can they charm, or enchant the warrior, so as to bewilder him in his path? Did the great serpent, as he is represented in their mythological tales, produce the flood, which submerged the earth and drowned mankind? Do the great *Coatl* of the South, and *Kenabic* of the North, typify an ark, or vessel of safety? State the various mystical notions they have on this, to the Indian mind, important subject.

151. Is the Belief in Metamorphosis general?—Do they believe that various quadrupeds, birds, or reptiles were transformed into men? Does the doctrine, as held by them, reach to objects in the vegetable, or mineral kingdoms, or in the open heavens? Were some of the stars once men? Was Ursa Major a bear? Was the rainbow a snare, or net? Were the thunderers once warriors renowned for their use of the arrow? Was the zea maize or Indian corn originally a handsome young man, with plumes, who came from the skies? Was the raccoon once a shell? Was the dormouse a mastodon? Who exercised this power of enchantment, or transformation? Were they magicians, or giants, or spirits of good or evil kind? What was the era of their reign on the earth? Will the doom of the transformed objects be terminated at death? Will it be reversed, and visited upon the enchanters?

152. Do they believe in the Pythagorean Doctrine of Metempsychosis, or the Transmigration of Souls?—Are the changes of the souls of men into degraded and brute forms the awards of a just or unjust punishment? Were they the acts of malignant or good spirits? Are the souls of men sometimes sent into birds of the upper air, as a reward for their deeds, and their unjust or premature loss of life? How are the souls of infants disposed of? How many changes did the souls of *Papukewiss* undergo, in animals and birds, before he was merged into a rock, that he might withstand the bolts of the Great Thunderer?

153. What particular Animals stand high in their Mythology, and how does this Belief affect their Institutions?—Do the respect and honor which are paid to the turtle, wolf, and bear, and to the clans who bear these devices, (*vide* 77,) arise from the supposed importance of ancient heroes or valiant men, who fell under the necromantic power of evil spirits or wizards? And what influence has this myth had on the original establishment of the Totemic system of the clans?

154. What fabled Gods, Demigods, Heroes and Viewless Spirits or Genii of the Air and Earth, have they embraced in their Oral Traditions?—Who were Inigorio and Inigohatatea? Are they allegorical representations of the Great Spirit's will in the moral world? What demigods, giants or heroes are denoted by the names Quetzalcoatl, Tarenyawago, and Manabozho? What missions did they respectively execute? Did they perform the labors or exploits of a Hercules, a Deucalion, or a Minerva? Are these traditions but a western version of Vishnoo, Budha, or Siva? Or were these persons reformers in manners and arts, government, or religion? Were they merely human or pseudo-divine? Who were the stone giants of Indian tradition? What calamity is prefigured by the fiery-flying heads? Who was Atahentsic? Who were Atahocan and Chebiabo? Who pierced the great elk at Itasca? What gigantic animal was buried under the mountains? Who were the giants Hobomok and Kluneolux? What allegoric personages live in a cave under Niagara Falls? Are there demigods who preside over the four cardinal points? Why is the west wind called the father of the winds? Who are the gods of the vernal and autumnal equinoxes? Who does Nope personify?

155. What are the Names and Classes of their principal Local Deities, or Woodland Spirits, and what Analogy do they bear to the Mythological Creations of the Old World?—Is there a class of creations analogous to fairies? Are there fairies of the water, as well as of the land? Are the Indian *puckwies* visible or invisible? Are they vicious or benign? Do these creations delight to dwell in romantic retreats, or at picturesque points? Are there local spirits, or a kind of nymphs and dryads, who reside in caves or at cascades, or inhabit cliffs or mountains? Do they protect or entrap travellers? Do the natives believe in mermaids or *mermans*? Is there any creation analogous to Comus, Ceres, Saturn, or Mor-

pheus? Is death personified? Have they a Hades, or land of shades? What Indian hero visited it? Are their creations of viewless kind and infinite stature, called *Weengs*, a species of gnomes? Can we recognize in the Indian idea of multiform spirits of a local character, the old Arabic notion of genii, or is this conception to be regarded as one of the original creations of the Red Race found here?

156. ARE THE INDIAN ALLEGORIES, FABLES AND LODGE STORIES, MENTIONED IN TITLE V. FRUITFUL IN THE REVELATION OF THEIR MYTHOLOGICAL NOTIONS?—Are such oral tales and relations common? Do they form a species of lodge-lore, which the young early learn? Are the relations confined to old, or privileged persons? *Vide picture-writing, No.* 245.

157. IS THUNDER PERSONIFIED?—How many thunderers are there? Are they located in different quarters of the heavens? What is their various character, and origin?

158. IS THE INDIAN MYTHOLOGY VERY ANCIENT?—What fabled monsters and dragons, with wings or horns, filled the antique epochs of the world; and who killed them, or how were the races extirpated? Has their system of mythology been affected by the introduction of Christianity? Something of this kind is thought to be observable in examining the ancient picture-writings of the Aztecs, written after the conquest of Mexico, and it is important to guard against this intermixture of original and interfused notions.

MANNERS AND CUSTOMS.

CONSTITUTION OF THE INDIAN FAMILY.

159. ARE THE TIES OF CONSANGUINITY STRONG?—Are there terms for each degree of relationship, and what are they for the different degrees? Do these terms embrace all the collateral branches? Are the affinities of families and clans traced far back, and, as there are no surnames, by what means is the line of descent denoted and rendered certain? Are the same names used for collateral relatives by the father's as by the mother's, side? Are the same terms used for elder and younger brother, and for elder and younger sister? Are the words aunt and uncle by the mother's side the same as aunt and uncle by the father's side? By what terms are the dead alluded to? State any peculiarities which may exist in the terms denoting kindred, age, or sex, or other particulars in the family names, which mark them, or distinguish the principles of speech in the family circle from those of other known nations?

160. IS THE FAMILY ASSOCIATION, OR MARRIED STATE, GENERALLY ONE OF A PERMANENT CHARACTER, AND PROMOTIVE OF DOMESTIC HAPPINESS?—Does the hunter state ensure abundance of food and clothing to the family? How is this state, in its domestic bearings, affected by polygamy, and what are the terms and relative affections of stepmothers and children? Are wives well treated under the actual state of the hunter life? Are they ever interfered with in the household affairs, and management of the domestic economy? Do they participate, in any degree, in the hunter's vocation, or forest labors, and to what extent?

161. ARE THE LABORS OF HUSBAND AND WIFE EQUALLY OR UNEQUALLY DIVIDED?—Is the labor and toil of hunting and supplying the family with meats a just equivalent, in point of time, for the cares and duties the wife bestows on the lodge, including its erection? Does the public security of their hunting grounds, arising from councils and warlike expeditions, enter into the views of the wife, as constituting an acceptable part of the husband's duty? Who makes the arms and implements of war? Who makes canoes, paddles, cradles, bowls, and dishes? Who plants, and hoes, and gathers the fruits of the field? Who makes fish-nets, weaves mats, and cuts rushes and gathers wild rice? Run through the entire class of forest labors, and draw a comparison between the relative industry, or time, devoted by the husband and the wife.

162. WHAT ARE THE USUAL CAUSES OF FAMILY JARS IN THE INDIAN LODGE?—Are domestic discords common? Is the loss of youth and youthful attractions in the wife a cause of neglect? Does barrenness produce dissatisfaction? Do children give their mother an additional power over her husband's affections?

Is jealousy a common cause of discord? In cases of a plurality of wives, does the eldest retain the precedence? Is the Indian character for comity, dignity, and forbearance, in the domestic circle, such as it has been generally represented? Do the Indian women disclose a passion for dress, and is the failure to appropriate a part of the hunt to this object among the causes of discord?

163. How is Order preserved in the limited Precincts of the Lodge? — Casual observers would judge there was but little. Inquire into this subject, and state what are the characteristic traits of living in the wigwam, or Indian house. How do the parents and children divide the space at night? How are wives, and females of every condition, protected in their respective places, and guarded from intrusion? Is there a prescribed or fixed seat, or *abbinos*, as it is called, for each inmate? Who fixes it? On what occasion is it changed, or enlarged; and are the rules governing this subject such as at all times and seasons to secure the local lodge rights and privileges of every inmate?

164. Sociality in the Lodge Circle. — Are the inmates taciturn and formal, or do they, when relieved from the presence of strangers, evince a general ease and spirit of sociality? Is this observable particularly when on their wintering grounds in remote parts of the forest? Do they eat at certain hours of the day? How many meals do they take in the twenty-four hours? Do they address the Great Spirit at any meal, or feast, by way of prayer? Are their appetites regular or capricious, admitting of great powers both of abstinence and of repletion?

165. Characteristic Facts respecting Marriage. — Is there any tradition of the institution of marriage? Has it the sanction of the Indian medas, or priests, or of the parents only? What are its ceremonies? Is the preparation of an *abbinos* in the mother-in-law's tent, to receive the bride, a part of these ceremonies? Is this act done with parade? Are the mats, skins, clothing, and ornaments, appropriated to it, where the parties can afford it, rich and costly?

166. Courtships. — How are these managed? Are there regular visits to the lodge, or are the interviews casual? Do young persons, of both sexes, adorn themselves, to become more attractive? Do they use any peculiar paints or ornaments? Do young men play near the lodge, on the pibbigwun, or Indian flute? Are these chants appropriate? Do they make presents to the object of their esteem? Are presents made to the parents? How is consent asked? When are the parents consulted? Are matches ever made without their consent?

167. Age and Condition of the Parties. — At what age do the Indians generally marry? Are there bachelors, or persons who never marry? Are there beaux, or young men addicted to dress? Do widowers remarry, and is there any rule, or limit of propriety observed? Do young widows usually marry again? Are their chances of marriage affected by having previously had children?

168. How does a Forest Life affect the Laws of Reproduction in the Species? — Does the full or scanty supply of subsistence govern it? Are the changes of location, fatigue, cold, and exposure to the vicissitudes of climate, felt in the general result of Indian population; and at what age do the women cease bearing? What is the highest number of children borne? What is the earliest known age of parturition? Are twins common? Is barrenness frequent?

169. Visits and Visitors. — Are strangers announced before reaching the lodge, and how are visits ordered? Do parties of Indians stop, at a short distance, and send word of their intended visit? How are the ceremonies arranged, and how are guests received and entertained? Is precedence always awarded to guests? Are social visits made, in which these ceremonies are set aside? Is there anything analogous to dinner or supper parties, distinct from the stated feasts? Are small cut sticks sent as invitations to guests? Is hospitality a strong and general trait? Are its rites ever denied, or have they been known to be exercised to cover schemes of perfidy, or for base purposes?

170. Birth and Infancy. — Are there persons who exercise the office of midwives? Are the labors of parturition severe? Are separate lodges provided? Are arrangements made in anticipation? Does any

female friend attend as a nurse? Are cases of solitary confinement rare? Is there any rite analogous to circumcision?

171. NAMING OF CHILDREN. — Are there any ceremonies at the naming of children? By whom is the name given, and from what circumstance? What number of days are suffered to elapse from the birth to the naming; is there any thing resembling the Hebraic period, or is it done at once? Does the father or mother bestow the name? Is there any Indian priest present? Are these names usually taken from the objects or incidents of dreams, which have impressed the minds of the sponsors, and are supposed to be sacred? What are the usual names of males and females? Give specimens. Are the children familiarly called by these names, as in civilized life, or are they kept secret? If secret, what is the cause? How do the children acquire nicknames? Is this the cause of the multiplicity of names which are often borne by the same individuals?

172. DIVORCES. — Has the wife or husband the right of divorce? Must there be good causes, and what are they generally? Must the chief of the village be consulted? What is the common practice? Which party takes the children?

173. NURSING AND MANAGEMENT OF CHILDREN. — How are children nursed and attended? What is the kind of cradle used — how is it constructed — is it well adapted to the purposes of the forest and the protection of the child from accident? Is it suited to promote the natural growth and expansion of the limbs? How do females become *in-toed?* Are the feet of female infants bound by their mothers in this cradle in such manner as to *turn in*, and do they thus determine their growth? At what age are children weaned? How do children address their parents? Do they abbreviate their words? How do mothers address their infants and children? Are there any terms of endearment?

174. FAMILY GOVERNMENT OF CHILDREN. — Is the domestic government left wholly to Indian mothers? Is it well exercised? Is there any discrimination, in the discipline, between male and female children?

175. INSTRUCTION OF CHILDREN IN THE TRADITIONS OF THEIR TRIBE. — How is the identity of their traditions kept up? Are children initiated in the knowledge, or lore of their fathers, by the mother, in nursery tales, or are they left to pick it up, at later periods, from mingling in dances, congregations and feasts? Do grandmothers exercise any influence in this department; or are there old persons who are privileged to collect evening groups in the lodges, and amuse or instruct them by stories or traditions?

176. STOLEN CHILDREN. — Are families often increased by the addition of white children, or youth who have been stolen in marauding excursions, in the frontier settlements? State any known instances of this kind. Was the incorporation into the family in these cases complete, and were the persons reclaimed in after life?

177. EFFECTS OF INTEMPERANCE IN THE FAMILY CIRCLE. — What are the effects of the introduction and use of ardent spirits, in the lodge, in deranging its order? Does it lead to broils and scenes of intoxication? Does it diminish the means of the hunter to procure food and clothing? Does it impair his capacity of hunting? Does it injure his health? Does it affect his reputation? Does it deprive his wife and children of necessary comforts? Do its excesses lead the victim, in the end, to want, to the murder of friends, killed in states of inebriation, and finally, to his own premature death?

178. WHAT MEANS ARE TAKEN TO PRESERVE THE FAMILY IDENTITY? — If the clan-marks or totems denote affinity, is it not rather the evidence of a general and not a near family connexion?

CUSTOMS AND EMPLOYMENTS AT LARGE.

179. HAS THERE BEEN A DECLENSION OF THE TRIBES IN THE UNITED STATES FROM ANY FORMER PROBABLE CONDITION, AND WHAT IS THE TYPE AND CHARACTER OF THE HUNTER STATE, AS IT EXISTS AMONGST THESE TRIBES? — Are any of the tribes quite degraded in the scale of being? Have they degenerated into any customs or practices revolting to humanity? Do they eat human flesh, upon any occasion, and if so, under what circumstances?

180. TRACES OF FOREIGN CUSTOMS. — Is there any proof of the existence of infanticide among the American Indians? Are the lives of female children held in less esteem than those of males? Are widows ever doomed to death on the decease of their husbands? Is there any tradition that they were ever burned, on such occasions, as upon a funeral pyre? Are devotees to religion ever known to sacrifice themselves to their gods, as is done in the East? Do they ever suspend themselves on hooks of iron, with the view of enduring meritorious sufferings? Do they wear particular spots on their foreheads to denote religious sects? Are there any castes among the North American tribes, or any vestiges of such an institution, or belief? Are any of the American waters, or great rivers, deemed sacred, and coveted in death?

181. PRACTICE OF SCALPING. — Do they, in scalping persons slain in battle, use any ceremonies, or adopt any practices which are of oriental character? Is the scalp-lock, which it is customary to cultivate, a usage of ancient origin; and is there any peculiar mode of tracing antiquity in its form and position?

182. TRACES OF THE PATRIARCHAL AGE. — Is the patriarchal feature strongly marked, in the Indian institutions? Note whether there be anything in their manners, customs, or opinions, resembling ancient nations of the eastern world. Observe, particularly, whether there be any customs respecting the sacrifice of animals, or the withdrawal of females, or any other well-known ancient trait, in which the Indian tribes coincide.

183. ASSEVERATIONS. — Do the Indians swear, or use any form of oath? Is the Great Spirit ever appealed to by *name*, or is the name carefully suppressed, or some other substituted for it?

184. FORMS OF GREETING. — What is the Indian mode of salutation? Have they any conventional terms for it? Do they shake hands? If so, is this an ancient custom, or is it done in imitation of Europeans? Do they greet each other by name? Did the Indians anciently rub or fold their arms together, as was witnessed, on the first meeting of the northern tribes with Cartier in the St. Lawrence, A. D. 1535?

185. HABIT OF SMOKING. — Is smoking a very ancient custom? Was there a time when their ancestors did not smoke? Did they bring the habit from abroad? Was the tobacco-plant given to them by the Great Spirit? How and when? State the tale. Was the gift made in the North, or did they bring the plant from the southern latitudes? If this plant will not grow, and come to perfection so as to bear seed, in high northern latitudes, is this not a proof that their general migration was from the southern or central latitudes?

186. APPROBATIVENESS. — Is this strongly developed in the Indian mind; and what forms of exhibition does it assume in the manners and customs? Is the war-path pursued as the chief avenue to fame? Are hunting, and oratory pursued with the same ultimate ends? Are there any other modes in which an ambitious chieftain can gratify the passion?

187. HABITS OF THOUGHT. — Is stoicism of feeling deemed a mark of manliness by the Indians? To what extent is the countenance a true exponent of the actual state of feeling? Does taciturnity proceed from a sense of caution, or is the mere act of silence deemed wisdom? What general theories of thought govern the manners of the sachems, and to what extent and in what manner are the maxims of conversation and of public speaking taught to the young?

188. QUICKNESS OF SIGHT AND ACUTENESS OF OBSERVATION IN THREADING THE WILDERNESS. — These have excited general notice, but the subject is still a matter of curiosity and further information. How are they guided when there is neither sun by day or moon by night? How is the precise time of the desertion of an encampment, and the composition and character of the party, determined? What are the elements of precision in this knowledge, so far as they are to be found in the plants, or forest, or in the heavens? Is there extreme acuteness of the senses, and a nervous power of appreciating the nearness, or relative position of objects?

189. CREDULITY AND SUSCEPTIBILITY OF BEING DECEIVED. — Are the Indians very prone to be deceived by professed dreamers, or the tricks of jugglers, or by phenomena of nature, of the principles and causes of which they are ignorant? Is not the surrounding air and forest, converted, to some extent, by this state of ignorance

of natural laws, into a field of mystery, which often fills their minds with needless alarms? Are their priests shrewd enough to avail themselves of this credulity, either by observing this general defect of character, or by penetrating into the true causes of the phenomena? Do the fears and credulity of the Indians generally nourish habits of suspicion? Do they tend to form a character for concealment and cunning?

190. How do their Physical Powers compare with the Strength of Europeans?—How many pounds can they lift? What are their comparative powers in running, or in rowing a boat? Are they expert and vigorous in handling the axe, or the scythe? What is the greatest burden which you have known an Indian to carry?

HUNTING.

191. What are the Principles of the Art of Hunting, as practised by the Tribe?—How does the chase vary, during the several seasons—what species of animals are chiefly sought in each, and what ceremonies take place on setting out, and on returning? Are there different modes of hunting different species of animals? What is the mode of hunting buffalo? How is still hunting performed? Sketch the various modes.

192. Social Ties and Secret Arts of the Chase.—In what manner do they form hunting parties, and what social ties unite them? How are the spoils generally divided? How are disputes respecting the division of game settled?* Are there any secret arts? If so, what are they—who teaches them? Are they paid for? What hours of the day are most suitable for hunting? How is the glare of light managed in hunting up a valley? Do they keep in the shade?

193. Decoys and Traps.—How are bears and wolves decoyed into falls and traps? How is the antelope approached? How are beaver trapped? Are aromatic baits used? State briefly the arts used by the Indians in deceiving the various species of game by light, by sound, by smell and color, or by cunning appeals to any of their senses.

194. Mode of Drying and Curing Skins.—This is a very important branch of the hunter's art, and it would be interesting to know the process, the various methods, and the amount of labor and time required. How are they packed and prepared for market? What are the indications of skins killed out of season, and how are pelts judged?

195. How many Modes have they of taking Fish?—Are fish taken in wiers and fish dams? Are they scooped up in nets at the foot of falls and cascades? State the manner of each method, and any other ingenious mode practised, and whether there is any mode of curing or salting practised at their fisheries.

196. Are the Arts of Hunting taught the Children at an Early Age?—Do they commence with archery? And at what ages are the boys generally competent to engage in the active labors of the chase? Can widows rely early on their sons for the means of subsistence? Do they ever, during the infancy of them, practise any part of the hunter's art themselves, and if so, what part? Have women, thus left alone, or deserted, ever been known to practise the use of fire-arms?

197. What is the Present State of the Arms and Implements used by the Hunters of the Tribe?—Have they abandoned the bow and arrows, partially or altogether? Do they use the gun or rifle, in hunting deer or buffalo? Are they well supplied with ammunition, and at reasonable rates? Can they readily command steel-traps, and other metallic implements? Facts of this character are essential in determining their condition, and ability to maintain themselves by the labors of the chase. In cases where tribes have advanced to the agricultural state, that fact alone will be sufficient to be stated, and will supersede any notices of this kind. The laws of the chase, and the civil power of chiefs have been referred to in prior inquiries on the organization and government of the tribe.

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* Vide, 91, 92, 93 and 94, for generic inquiries on the power of the chiefs on this subject.

WAR.

198. How are War Parties Raised, Subsisted and Marched? — Is there any thing in the Indian customs equivalent to enlistment? If joining the war-dance be thus construed, for what period is the enlistment or assent good, and how and when may its obligations be terminated or broken? Can a warrior be punished for turning back? Must he furnish his own provisions? Is there any public arrangement, whatever, in an Indian war, for arms, subsistence, or transportation?

199. Order of March and Precautions. — Do men set out for a designated rendezvous, singly, or in what manner? Are there any ceremonies observed before marching? How is the march of the party conducted after they are assembled? Do they move in a body, or separately in files or sub-parties? Do they eat any root, or substance which is supposed to have the virtue of deadening pain, or inspiring courage? What precautions are observed on the march, and in their encampments — are sentinels ever posted? Are the priests or jugglers consulted? What signs or omens are noticed? How do these affect them?

200. Subordination. — To what extent do the chiefs exercise the duties and rights of officers? Is subordination observed? Have they any right to punish its infraction? Do they command in battle? How are orders conveyed? Have they aids, or runners? Are battles planned? Are different chiefs assigned to different locations? Do they fight in line? Do they ever plan retreats, or appoint a rallying place in rear?

201. Stratagems. — What are the usual devices of attack, resorted to? Are they always planned with a minute knowledge of the topography? What are the usual manœuvres? Is the war-whoop employed to order an advance, or retreat, or side movement? When, and under what circumstances do they quit a masked wood, or defile, and take the open plain?

202. Captives. — How are prisoners secured and treated? Has any captive been burned at the stake, since the burning of Col. Crawford, or offered to appease the spirit of cannibalism, in modern times? When their lives are spared, and it is designed to adopt them in families, what are the usual ceremonies? Are men who are found wounded on the field of battle killed?

203. Is Personal Servitude Recognised? — Are there any persons, who, having lost their liberty, or forfeited their lives, are reduced to slavery, or placed in the relative position of *peons*, or menials, who are compelled to work, and carry burdens?

204. Treatment of Female Captives. — Is chastity uniformly respected in war? Is there any known instance of its violation in the marauding parties? Is this trait of character connected with any superstitious opinions?

205. Costume in War. — What constitutes the ordinary dress of warriors, on a war excursion? What paints are used, and how are they applied to different parts of the person? What feathers are worn on the head, as marks of former triumphs?

206. Head Dress. — Do they wear frontlets, and how are they constructed? How is the hair dressed? Is the head shaved to form the scalp-lock? Are there necklaces of animals' claws, or other ornaments; are there back dresses? Are there ornaments for the ears, or arms, legs, or feet? Are any of these constructed so as to emit jingling sounds?

207. Arms and Implements of War. — How have these varied in the lapse of time? Are fire-arms substituted for the bow and arrow in war, as they are supposed to be, generally, (*vide* 197,) in hunting? Are war-clubs, tomahawks and knives, employed? How does the scalping-knife differ from the common Indian knife, if it differs in any respect?

DANCING AND AMUSEMENTS.

208. Is Dancing a National Trait of the Tribe? — Is it confined to males? How many kinds of dances are there? State the peculiarities of the various kinds of war-dances, and dances of honor, triumph, religion, or hunting? Is dancing a characteristic mode of expressing popular feeling or opinion on all subjects, and of thus swaying or confirming the action of the tribe? If females are excluded from the principal dances, are they admitted to the choral band of singers or musicians? Are the principles of the various dances, and the choruses, taught to the youth; and at what age do the latter generally join in the ring?

209. Sports and Exercises. — Are there contests in racing and ball-playing? How many kinds of games at ball have they? Describe them, and the manner in which the contending parties are chosen, together with the rules of the games? Are there trials of skill in wrestling? Are there races at fixed times in which the youth may all engage? Are the stakes high on these occasions, and of what do they consist? Illustrate these amusements by reference to the effects which they have had on their history and manners.

210. Games of Chance. — How many kinds of games of chance exist? Is the tribe much addicted to these games? Describe them, with their rules, and the general effect of the gambling propensity, if any exist, on the tribe? What are the arithmetical principles of the games of the bowl and the moccasin? Is there a spirit of private gambling, and if so, are there any instances of its power of infatuation?

DEATH AND ITS INCIDENTS.

211. Deaths and Funerals. — What are the characteristic facts connected with these subjects? When a person dies, how is the corpse dressed and disposed of? What length of time is it kept? Is it addressed, as if living, and capable of hearing, prior to its removal, or at the grave? What is the character of these addresses? What implements are buried with it, and of what material do they consist, and why are they deposited with the corpse? Is this burial of utensils and relics an ancient custom, and if so, does not the examination of old sepulchres and places of burial, to compare these relics, afford a means of judging of the state of arts in the Indian tribes, at various eras?

212. Structure and Position of the Graves. — Are burials usually made in high and dry grounds? Have you known any tumulus or barrow to be erected, in modern times, to the memory of a distinguished chief? Are the Indian graves usually well excavated and protected, and in what manner are these objects effected?

213. Position of the Corpse with regard to the Cardinal Points. — Are the bodies buried east and west, and if so, what reason is assigned for this custom? Is it an ancient custom? Why are not bodies buried promiscuously, as to their position, and without respect to the cardinal points?

214. Standing or Sitting Posture. — Are bodies ever deposited in these positions, and if so, what is the mode of interment, and how is the posture preserved?

215. Embalming. — Are there any herbs, or spices placed with the corpse? In it wrapped in barks, or cloth, or submitted to any process analogous to embalming?

216. Scaffolding of Corpses. — To what extent, if any, is this custom practised in the tribe? How are the bodies prepared for this purpose? Are they inclosed in barks or put in boxes, previously to their being placed on the branches of trees, or on posts? Are they subject to be depredated upon, in these cases, by beasts of prey or carnivorous birds?

217. Funereal Flags, or Ensigns of War. — Are displays of this kind made over the graves of distinguished chiefs? Is this a modern custom, or were the Indian feather flags formerly disposed of in this way?

218. Collection and Re-interment of Bones. — It is observed in various places that such deposits were made. The custom, if ever known to the ancestors of the present race, is obsolete. Did they ever practise it, or is it due to a prior race? If practised, how was it done and with what ceremonies? Was it the duty of particular classes of men? What time was suffered to elapse before the bones were gathered? Was there, on these occasions, public funeral ceremonies, attended with wailing, and other demonstrations of grief?

219. Charnel Houses. — The traditions of the tribes denote such depositories to have existed in ancient times. How were they constructed, and the bodies protected against depredations from wild beasts?

220. Incineration of Bodies. — Is this ever practised? Are there any traditions on the subject?

221. Mourning and Observances. — Do they scarify themselves for the dead? What is the garb, or sign of mourning? Are the dead lamented, and how? Are visits periodically made to the graves? Do widows ever carry, for a limited period, images or bundles of cloth, as symbols of mourning to represent their deceased husbands? Are long beards ever suffered to grow in consequence?

222. Funeral Fires. — Are fires ever kindled on newly made graves? If so, at what times, how long are these fires continued, and what is the object of them?

223. Grave-Stones, or Monuments. — What species of monumental structures of this nature are usually erected? Are stones ever employed to mark the place of interment? If posts, or tablets of cedar or other species of wood, be placed at the head and foot of graves, are there any hieroglyphics, or devices put upon these fixtures, and what characters do they consist of, and how are these to be understood? For further inquiries on the devices generally, see "picture-writing," No. 245.

226. Is there any Mound now in the Process of Building in the Territories of the Tribe, or within the Boundaries of the United States, particularly on its extreme Southern and Western Confines? — More than three millions of cubic feet of earth are estimated to be contained in one of the antique western mounds. Is there sufficient power and energy in the tribe, or any tribe known to you, to have executed such a labor? Could such works have been erected by the labors of women alone? Is there not denoted an energy and capacity of construction in the antique mounds, superior to any which is now possessed by the tribes?

225. Treatment of Orphans. — On whom does the care of orphans devolve? Does the chief of the tribe take any notice of children thus left, if there be no near relatives?

226. The Poor and Aged. — Are aged and infirm persons ever abandoned? Who takes care of old and feeble persons destitute of children or relatives, when they can no longer hunt, or attend to any forest labors or care, by which they might have contributed, in part, to their own support? Do the chiefs direct food to be left? Do the village hunters make voluntary contributions? When such persons die, who buries them? Philanthropy seeks to ascertain the bitter necessities of savage society, and any facts or incidents illustrating them, which may serve to guide public opinion, will be important.

227. Lodges, or Dwellings. — What are the materials, form, size and mode of construction of their lodges? If skins or bark be employed, what skins and what species of bark, and how prepared, and how long will the material last? Are the tents, or lodges, easily removed from place to place, or are they of a permanent character, so as to be left standing during their periodical absences, and re-occupied? How many persons will they generally accommodate? Are they graduated in size accurately to the number of the family, and if so, how many square feet of ground-surface does each inmate occupy? Who constructs, removes, and re-erects them?

228. Canoes, or Boats. — Of what material are these made, how are they constructed, and what is their usual capacity? If built of bark, are they ribbed with cedar, and built on a frame, and in what manner is the sheathing material attached, and closed, so as to be impervious to water? If made from a solid log, how is it excavated, and what are its comparative properties in river navigation?

229. MECHANICAL APTITUDE OF THE TRIBE. — Are they disposed to advance from the barbaric type? If such advances have been made, what are they, and to what extent are mechanical tools of the most approved kinds employed?

230. MODE OF COOKING AND HABITS OF THE TABLE. — Is raw meat ever eaten? Do they roast their meat done, or is it often the practice to cook it overdone? Have they any peculiar skill in boiling fish? Do they use much salt, or relish milk? Do they ever, or have they in former times, followed the practice of boiling meat or vegetables in vessels of wood, or bark? Do they use metallic cooking vessels, generally, at the present time, and if so, what kinds? Or are the ancient clay pots of the Indians still employed in remote positions? Have they any regular periods for meals?

231. METHOD OF CURING MEATS. — In what forms is smoke applied in the drying and preservation of various kinds of meat, or provisions? Do they employ salt in curing the tongues of the buffalo and the reindeer? How is the flesh of the deer, the moose, and the buffalo preserved? What is the method of curing the tail of the beaver, and to what extent, and in what manner, are the various species of fish, referred to, in 195, as taken in quantity, preserved?

232. SPONTANEOUS FRUITS AND PRODUCTIONS OF THE FOREST. — To what extent do the purely hunter tribes rely on these? Give a catalogue of them, denoting the various kinds of roots, truffles, berries and nuts relied on. Is the wild honey sought, and in what quantity is it afforded? Do they collect and boil the sap of the sugar maple, in its season, and to what extent does it form an element in the means of their subsistence? Is the wild rice gathered in the interior lakes and rice grounds?

233. PINCHING SEASONS OF NECESSITY. — What species of barks are eaten on these occasions? Do they collect old bones, in times of great hunger, and extract their oily, or acrid juices by boiling? Is the lichen called *tripe de roche* eaten, and how is it prepared? The shifts and necessities to which the hunter tribes are driven in seasons of extreme severity, or want, are such as often to shock, while they create strong appeals to humanity; but the facts are required, to show the fallacy of perseverance in such a precarious mode of life.

COSTUME.

234. WHAT IS THE ORDINARY DRESS OF THE TRIBE, MALE AND FEMALE? — Of what materials is it composed — of what quality and color? If any part of their garments be made of materials the growth or fabric of the Indian country, state the kind of stuff used, and in what manner it is prepared, and the places of its growth or manufacture. How long will such dresses, whether made of foreign or domestic material, last, and what is the actual value or cost of each, distinguishing male from female?

235. ADAPTATION OF DRESS TO SEASONS AND OCCASIONS. — The mode of dress and accoutrement for war is inquired into by No. 207. Are there any other peculiar adaptations of dress, to varying circumstances? Are there summer and winter dresses? Is there particular attention paid to robes designed for public occasions? Is there any thing peculiar to distinguish a civil or war chief from a medicine man, or Indian priest? Are the Indian dresses removed at night? If they be slept in, wholly or in part, what part is retained, and what put off?

236. ORNAMENTS. — Do they attach a peculiar value to ornaments? What kinds of ornaments are most desired? In what shape is silver worn? What species of the decorations of dresses are derived from birds, quadrupeds, and other animate objects? Are shells still worn in their elementary forms, and what species? Is a high value attached to the feathers of the war eagle? What species of ornaments are furnished, at the present time, by the state of the fur trade?

237. DYES AND PIGMENTS. — Are there any native dye-stuffs, or roots or vegetables, employed in coloring parts of their clothing, or ornaments? What are these dyes — how is the coloring principle extracted, and with

what mordant is it set? Do they ever tattoo, prick or puncture their faces, breast and arms, and how? Is vermilion still sold to them? What kinds of colored clays and ochres, or native oxydes, are employed? Are white or red clays ever smeared over the hands, and their impress marked on the body, or clothing?

238. BADGES OF OFFICE. — How many kinds have they, and of what material do they consist?

239. PHYSICAL TRAITS, AS AFFECTED BY COSTUME. — What are the customs and fashions of wearing the hair and beard? Is the whole head shaved? Have they any preparations for killing, eradicating or dyeing the hair? Is the beard generally extirpated by the tweezers, or other mechanical means? Are there exceptions to its growth or to the reigning customs?

240. PHYSIOLOGY, AS BEARING ON ETHNOGRAPHY. — What is the geometrical and physical type of the Indian *skin*, as examined under a magnifier? How many pores exist in a square inch, and what is the distinctive shape of them? Note, also, the rugosæ, shade of color, and other minute physiological traits.

INTELLECTUAL CAPACITIES AND CHARACTER OF THE RACE.

241. MENTAL POWERS. — What is the general scope and capacity of the Indian mind, as compared with other stocks of the human race? Does it bear most resemblance to those of the Asiatic, or of the European group? If it disclose traits more akin to the elder, or oriental stocks, in what do these traits consist? Are their minds of an inductive cast? Are they capable of pursuing logical trains of thought to a just conclusion? Is this faculty observed to be brought out and strengthened by education? Are they naturally possessed of strong powers of memory and forecast? Are they of a reflective habit? Do the moral propensities and affections generally predominate over the physical? Are they of a grave, or light character; a sober, or gay cast of mind; a fervid, or cold temperament?

242. PERSONAL INSTANCES. — Has there appeared, in their history, any individual noted for his natural or acquired powers as a physician, linguist or moralist, or any one who has evinced ability in the cultivation of any of the exact or moral sciences?

243. GENERAL MODE OF THE EXHIBITION OF THOUGHT. — Have they any maxims which are used in conversation? Do they repeat, in their families or at assemblages, any thing of the nature of studied compositions or laments? Does the general state of their oral traditions, as traced in the scenes of private life, evince strong powers of metaphor or allegory, or denote any dawning or vestiges of fancy or invention? Inquire into this department with all the means you can; more particularly in reference to the following topics:

244. ORATORY. — What are the general characteristics of Indian oratory? How is metaphor managed? Are their speeches as replete with figures and tropes as they are usually depicted in fictitious writings? What traits, in the specimens of Indian eloquence which are known, are most remarkable? Do the speakers excel in simplicity, clearness, and strength of language? Do these specimens derive much of their force from the political attitude or important position of the speaker? Are there any continued strains of eloquence, or sustained appeals? Give any authentic specimens known to you, among living orators.

245. ART OF PICTURE-WRITING. — Allusion to this subject is made in Number 156. To what extent do the tribe practise this art? Is it generally in the practice of drawing the figures of animals, birds, or other objects, on trees, pieces of bark, dressed skins, or other substances? What is the general purport of these pictorial devices? Is their meaning fixed or exact? Is there any known system in the annotation? Do they convey different kinds of information to the tribe? And how are the characters interpreted? Is there a system of figures and devices, which the people generally understand, and which the mass of the tribe can interpret and explain? Or are these devices known only to the medicine-men or priests? Are devices and drawings which have been left by hunting parties at the scenes of their success, designed to inform others of the tribe, who may visit these scenes, of the *names* or *clans* of the successful hunters, and the *number* and *kind* of game taken? Is

information conveyed, by this system, to distant parts of the tribe, of travellers, strangers, or others, military or civilians, who have passed through their country, denoting their force and object? What information is generally recorded by these simple inscriptions? And what other forms does this pictorial art of the Indians take? Can the medicine-men or medas record their songs by it? Describe the system, and give specimens of the drawings, noting the different kinds of pictorial inscription, the method of its interpretation, and its peculiar character and value to a people who are without letters. How does it compare with the Aztec system? Is it largely applied to mythological subjects connected with their oral legends? (Vide Number 247.)

246. INVENTION OF THE CHEROKEE SYLLABICAL ALPHABET, OR SYSTEM OF NOTATION. — What are the principles for recording thought, which are developed by this concrete alphabet? Under what circumstances was it invented? How many elementary and how many compound sounds or syllables does it provide for? Is it applicable to recording the sounds of *other* Indian tongues besides the Cherokee? Is the system it provides generally understood by the tribe, or much employed? Are the Scriptures, which are printed and circulated in this character, generally read in Cherokee families? Is it likely to be of permanent benefit or utility to the tribe, to whose language it appears exclusively adapted?

247. ORAL IMAGINATIVE TALES AND LEGENDS. — What can be stated on this topic? In examining their notions on the immortality of the soul, (numbers 146, 156,) the existence of such fables, or allegories, is alluded to. It is desirable to know how general they are. Are stories of giants and dwarfs, and wild adventures of men and genii among woods and forests, related for the amusement of the circle of listeners, around the evening fire-side? Do these tales and oral sagas of the wigwam, reveal the actual notions of the tribe, on their religion and mythology, or their ideas of a future state?

248. DOCTRINES AND OPINIONS REVEALED IN THE SHAPE OF ALLEGORY. — Are these legends found to embody and exemplify their ideas of transformations necromancy and the power of sorcery? Can we perceive, in these imaginative efforts, the true doctrines entertained of good and evil spirits, fairies, ghosts, or any other form of aboriginal story-craft? Are any of these tales related to demonstrate to the young the power or ubiquity of the Great Spirit?

249. ORAL TALES, A VEHICLE OF INSTRUCTION. — Do the allegories and fables ever convey moral instruction or history to the young? Is there a frequent attempt in their lodge-stories to account for the origin of animals, and other objects of creation, animate or inanimate? And do they thus shadow forth the true Indian philosophy of life? Transmit some of these native tales, which may serve to give a general idea of their mental power and character, and the scope of imagination evolved.

250. MUSIC, SONGS AND POETRY. — What is the character of the Indian music, songs and poetry? How many notes, or finger-holes, have they in their flute, or *pibbegwun*, and by what scale are they varied, and what analogy does this instrument bear to the ancient Arcadian pipe? Are there different styles of music and songs for war, religion and love? Are the chants accompanied by other instruments, and if so, what is the character of these instruments? Is there more than one species of drum? In what manner are the Indian drums made? Is the rattle made in various ways, and how? What resemblance or connection have these instruments, in their mechanical structure, and the power of originating or modulating sound, to the ancient musical instruments of the Aztecs, or other nations of the tropics?

251. WHAT IS THE GENERAL CHARACTER OF THE INDIAN SONGS? — Is there any rhyme in them? Are the words collocated so as to observe the laws of quantity? In other words, are they measured, or are the accents in them found to recur at fixed and regular intervals? Has there appeared any Indian poet?

252. WHAT ARE THE SCROLLS AND TABLETS WHICH HAVE BEEN TERMED "MUSIC BOARDS," AND "BARK SONGS?" — Are these mnemonic records of songs executed in the manner of the Indian picture-writings, referred to in Number 245? If so, describe them, and indicate the mode of connection between the words and music, and the devices?

253. INDIAN CHORUS. — Is the chorus a characteristic part of their songs and music? Are the Indian choruses more fixed than other parts of a song? How many syllables do they consist of in a war-song, a religious song, and a hunting song? Is the name of the Great Spirit, or the Deity, denoted in any of these choruses?

254. LAMENTS FOR THE DEAD. — Is it the custom to call on certain persons to frame these laments? Are the laments, themselves, of a poetic character? Do they bewail virtues, or broken affections? If laments are made by professed persons, who are skilled in the use of their language, are these persons, also, skilled in song-making and song-singing, generally?

255. WHAT IS THE CHARACTER OF THE WAR-SONG? — Do the strains recite former triumphs, or breathe defiance or boasting? Do they evince patriotism and the love of military glory? Do they consist of continuous verses, or broken strains independently uttered? Have they a particular chorus? State, also, the character of the death-song. Do they recite their triumphs in hunting as well as in war?

256. SACRED SONGS. — Are there hymns to the sun, or to the Great Spirit? Do the prophets utter any secret incantations, which are supposed to partake of a sacred character?

257. CRADLE SONGS. — Does maternal affection find any expression in strains analogous to lullabies or cradle hymns? Are there love songs? Have you noticed any bacchanalian songs or catches? The character of a people or race is eminently shown in their songs and recitals at their convivial and social assemblies, whether these be for the exercise of sports, dancing, singing, or any other forms of merry-making; and nothing can be more illustrative of the cast and temper of mind and thought of the Indian race, than well-authenticated specimens of their songs, music, and poetry. If there be any thing deserving of the name of painting or sculpture, it may also be appropriately mentioned and described under the present general head.

PRESENT CONDITION, AND FUTURE PROSPECTS.

258. THE RESULT THUS FAR. — How far has knowledge, art, and commerce, and the general progress of civilization, affected the improvement of the Indians, and changed or modified their original manners, customs, and opinions? State the general impressions which have been made, and observe what modes of treatment and policy have done best, and on what points the Indian character, in its advanced or semi-civilized phases, usually breaks down.

259. CROSS OR AMALGAMATION OF RACES. — What are the prominent effects, physical and intellectual, of the intermixture, by marriage, between the European and Indian races? Has the tribe been much affected by such intermarriages? General facts, only, are sought.

260. RATIO OF INCREASE. — What is the present rate of progress of the population of the tribe, compared with former periods? Are they advancing or receding? How will it compare with the ratio from A. D. 1800 to 1820, and from the latter to 1840? The census "forms" transmitted will show the existing population, but not its former state, nor the results that may be anticipated in the present location and circumstances of the tribe.

261. HEALTH OF THE TRIBE. — How does the agricultural state, in the cases where it has been embraced, affect the laws of reproduction, and what change, if any, has been noticed in the character of the diseases of the removed tribes? Is their general health better, and how, if to any extent, has it been influenced by full and regular means of subsistence? Are fevers, or affections of the liver, as frequent on the elevated plains west of the Mississippi, as they were in their former positions? How does the change of climate affect pulmonary complaints?

262. COSTUME AND CLEANLINESS, A TEST OF CIVILIZATION. — What general changes have taken place in this regard in the tribe, and in their habits or practices of cleanliness, modes of living, and general housewifery? Details on this head are sought under Nos. 227 to 240; and nothing but the general results on the tribe, as an increment in their advance in the scale of civilization, is here required.

263. FIELD LABOR IMPOSED ON FEMALES. — Is this test of the barbaric or hunter state still tolerated; and, if so, to what extent? The condition of woman, as a laborer in the Indian community, has been asked for, No. 161. It is here wished to ascertain whether there be any whole tribes who have passed beyond this marked phasis.

264. PROGRESS OF CHRISTIANITY. — What is the present state of the tribe in this respect? What progress has been made in delivering it from the dominion and influence of the native priests, prophets, and jugglers? How long has it enjoyed the advantages of Christian teachers? What means were first employed to gain a hearing for the doctrines? Were they found efficacious, or were they varied, and what has been the most successful mode employed?

265. TEMPERANCE. — Are the principles of temperance in the use of ardent spirits on the increase or decrease? What are the prominent causes operating on the minds of persons yet addicted to the use of them, and what are the best means, at this time, of further discouraging the use of such drinks, and of effecting their entire exclusion from the tribe?

266. THE CAUSE OF EDUCATION. — What are the prominent facts in relation to this important means of reclaiming and exalting the tribe? What means have been found most effective in the education of their children and youth? Have females duly participated in these means, and has any part of such means been applied to such branches as are essential to qualify them for the duties of mothers and housewives? Are the ancient prejudices of parents on the subject of education on the wane, and what is the relative proportion of the young population who, in the last period of ten years, have received the elements of an English education?

267. STATE OF THE MECHANIC ARTS. — Forms have been prepared to bring out the existing state of facts in the tribe on this head, but they do not denote the prevalent state of feeling and opinion on the subject, nor the progress which has been made. It is known that the tribes rely greatly on white or hired mechanics, who are provided for by treaties, and paid by Government. Are they beginning to entertain true views on this head, and do they evince a desire to do their own mechanical labors? In this connection it may be proper to inquire whether the native mechanics are capable of furnishing them their teams and wagons for draught and pleasure, and with chains, ploughs, and bars in the labors of agriculture, and horse furniture and gear, suited to a growing and thriving people?

268. IMPROVED MODES OF AGRICULTURE. — Is there any interest observable on this head? Are there rotations of crops? Are there proper theories embraced in the application of manures? Do they employ marl, lime, or gypsum, on portions of lands adapted to them? Do the number increase who cultivate flax, hemp, tobacco, or cotton, in their respective latitudes? Do they manifest a desire to obtain improved breeds of cattle, horses and sheep? Is there a general desire to plant fruit trees? Are the most approved kinds of agricultural implements used?

269. MEANS OF COMMUNICATION. — Have the tribe provided for the construction of roads, bridges, and ferries, either by an appropriation of their general funds, or by imposing the duty of personal service or tax, on the residents of the several districts?

270. THE ENGLISH LANGUAGE A MEANS OF CIVILIZATION. — To what extent is the English language spoken, and English books read, and what is the tendency of opinion and practice on this subject, in the tribe? In giving replies to these queries, express your opinions freely, and state any fact, or mode of procedure which, in your judgment, would tend to advance the welfare or promote the happiness of the tribe. The general question of the advance and reclamation of the tribes, as connected with the present state of the Indian trade, has been examined in queries 95 to 105, inclusive. The bearings of these interrogatories on their future state, and the obligations imposed on the people and government of the Union, by their position in the scale of nations, are further called out in an examination of some points in the legislation of Congress respecting them in queries 106 to 115; and the questions on the actual condition of the tribes who are more advanced, and have set up new governments on the territories assigned to them west of the Mississippi, 116 to 118, are designed to complete this view of the changes wrought in the position of the tribes, since their discovery, about A. D. 1600. It is important, as they advance, as many of them now do, in their means and population, and in the progress of education and agriculture, that we should scrutinize the whole class of facts on which this advance depends, in order to give it the greater impetus and permanency. In this view, the subject is commended to your general reflection and scrutiny, in the following subjoined inquiries on their general history and languages.

GENERAL HISTORY OF THE AMERICAN TRIBES.

271. PROOFS FROM TRADITION. — Who were the earliest inhabitants of America? What is the light of tradition on this subject? Were the ancestors of the present Red Race the Aborigines? What evidences exist, if any, of the occupancy of the country by man prior to the arrival of the Indian race?

272. PROOFS FROM GEOLOGY. — Are there any evidences of the country's having been occupied by man prior to the deposition of the tertiary, or the diluvial strata? Are such evidences confined wholly to the unconsolidated deposits; and, if so, to what deposits, and of what probable eras?

273. PROOFS FROM ANTIQUE BONES. — How deep, in any beds or deposits, local or general, of the upper geological formations, are the bones of extinct or existing kinds of quadrupeds or other animal remains to be found? Have the fortunes of the Red Race, or any prior race, been connected with, or are they illustrated by the extinction of the mastodon, or other large animals whose bones are now found in a fossil state?

274. PROOFS FROM ASTRONOMY. — What are the general conclusions to be drawn respecting the era or eras of the antique settlement of America, from the knowledge of astronomy, the style of architecture, the system of religious belief, and mythology, the state of art, or any other department of historical or antiquarian investigation connected with the history of the tropical or equinoxial tribes?

275. PROOFS FROM LANGUAGES. — Do the American languages offer any proofs, in their grammars, or vocabularies, of ancient connexions with oriental or other foreign nations?

276. PROOFS FROM TOPOGRAPHY AND GEOGRAPHY. — What probable facts or just conclusions can be drawn respecting the ancient point or points of approach to the continent, from topographical and geographical considerations?

GROUPS OF TRIBES WITHIN THE UNITED STATES.

277. WHAT INDIAN TRIBES IN THE UNITED STATES ARE CLEARLY DERIVED FROM THE SAME STOCKS? — How are remote tribes to be traced, and into what number of generic families, or groups, can they be ultimately classed?

278. WHAT IS THE EXTENT OF THE ALGONQUIN FAMILY? — How many tribes of this class yet exist, and how many are known to be extinct? What relation do the ancient Lenni Lenapes, or Delawares, hold in this family?

279. OF WHAT GROUP ARE THE IROQUOIS, AND HOW IS IT MADE UP. — Are there other tribes besides the Wyandots allied to it? Were the Eries of this group?

280. ARE TRIBES SPEAKING DIALECTS OF THE DACOTA, OR SIOUX LANGUAGE, EXTENSIVE? — Does it embrace many of the prairie tribes of the Missouri? To what extent are they to be traced towards the West and South?

281. WHAT FACTS EXIST FOR FORMING AN APPALACHIAN GROUP? — Has such an arrangement advantages over the more circumscribed term "Floridian?" In what manner are we to proceed in assigning the Muscogees and other tribes their appropriate positions in this important group? Was there an early infusion of foreign blood into any branch of this race?

282. WHAT CONNECTION DO THE UNITED STATES INDIANS HOLD, ETHNOLOGICALLY, TO THOSE OF MEXICO? — Are there any proofs of affiliation in the grammars and vocabularies? What lights are afforded by history or tradition? Was the valley of the Mississippi probably settled at the period of the establishment of the Aztec empire, under the predecessors of the Montezumas?

283. WHENCE CAME THE NATCHEZ AND THE UTCHES? — Are they of the true Appalachian type? Were there ever a people called Caribs, inhabiting the part of North America called Florida by the Spaniards? What can be said, historically, of the Appalaches, or Appalachians, proper?

284. COURSE OF MIGRATION. — Is the ethnological chain of migration to be traced into the Mississippi valley, and along the Atlantic coast, from south to north, or *vice versâ*? Is this chain denoted by any remains of art, as well as by language and tradition? What proofs of such an expansion of tribes are to be sought in climate and geographical phenomena?

285. APPRECIATION OF REMOTE EVIDENCES IN ESTABLISHING GROUPS. — Is there any evidence of ancient affinities to be found in the arithmetic or astronomy, or in the numerals and mode of computing time of the separate tribes? Are mounds and ancient places of defence supposed to evince a state of art, from which any reliable deductions of the affinities of races may be drawn?

286. ARE RELIGIOUS RITES AUXILIARY AIDS IN THE ERECTION OF GROUPS? — Is the name for the Deity, or Great Spirit, necessarily more prominent than any other? What characters do the sun and the moon generally bear, as types? Are the traces of an ancient fire-worship on this continent extensive and reliable? Is the relative position of the mounds explicable, in some cases, on this theory? Have analogies, in prophetic arts, necromancy, music, picture-writing, and oral fiction, any bearing in denoting similarity of origin?

287. PHILOSOPHY OF CHANGE IN LANGUAGES. — How, or by what process in syllabical mutation, have words changed, so as to assume the character of new dialects and languages, on this continent, while the plan of thought, or grammar, has varied less, or been retained?

288. FIXITY OF RACES. — Have there been any striking changes in the physical type of the Indian race, beyond that produced by latitudes and longitudes, and by their manner of subsistence?

TOPICAL INQUIRIES ILLUSTRATIVE OF GENERAL HISTORY.

289. REMNANTS OF THE NEW ENGLAND TRIBES. — What is the number and condition of the Penobscots? Are the Abenakis, who fled from Norridgwack, still under the care of their original teachers, and what progress have they made in industry and the civil arts, since their withdrawal to Canada? What vestiges of the Massachusetts group of tribes remain within the boundaries of that State, inclusive of Martha's Vineyard and other Islands? What are the present number and condition of the Narragansetts of Rhode Island, and of the Mohegans of Connecticut?

290. NATIVE TRIBES OF NEW YORK. — What is the present number, location, and state of industry of the Iroquois? Was their confederacy of ancient or modern date; and what were the principles of their government? Are there any of the stock of the ancient Mohegans, Munsees, or other tribes of the Hudson valley, or of Long Island and the adjacent coasts, left within the boundaries of this State? What is the meaning of the word Manhattan? Did Hudson ever land on this Island?

291. WHAT INDIANS STILL RESIDE IN NORTHAMPTON COUNTY, VIRGINIA? — Are they of the Powhattanic stock; and are there still to be found, in other parts of that State, descendants of the Nottoways, or other Indians belonging to that family?

292. WHAT NUMBER OF THE CATAWBAS OF SOUTH CAROLINA REMAIN? — Do the Indians of this tribe, who live in York district, own any lands; and, if not, what annuities do they receive from the State; and are these annuities applied in such manner as to promote their education and industry? What affinities exist between the Catawba and other existing languages?

293. WHAT ARE THE CIRCUMSTANCES UNDER WHICH A PART OF THE CHEROKEES ARE LIVING IN NORTH CAROLINA? — How many persons remain at the location secured to them, and what progress have they made in agriculture and civilization?

294. DO THE SEMINOLES, WHO REMAIN IN FLORIDA, INCREASE IN NUMBER?—Have they made any advance in agriculture or the arts, and is their continued residence in that State best suited to promote their happiness and welfare, and to secure, at the same time, the prosperity of the State settlements?

295. WHO WERE THE MOST ANCIENT TRIBES INHABITING FLORIDA?—Is there any reason to believe that Cuba, the Bahamas, or any of the northernmost groups of the West India Islands, were originally peopled by Indians from the peninsula of Florida? Who were the Appalachites spoken of in Davis' history of the Caribbee Islands? Did a colony of Minorcans ever land, in ancient times, in Florida? What was the fate of the French, who abandoned themselves to the wilderness of Florida, on the failure of Laudonniere's plan of settlement? Are there any evidences of De Soto's expedition to be found in existing Indian names?

296. WHAT REMAINS EXIST OF THE INDIAN POPULATION OF THE STATES SOUTH OF, OR BORDERING ON, THE SOUTHERN RANGE OF THE APPALACHIAN MOUNTAINS?—In what manner were these tribes originally related; what incidents led them to leave their original sites on the southern and southwestern streams, and how are they distributed and located at the present time?

297. HOW FAR ARE THE CLAIMS OF THE NORTH-MEN, AS THE ORIGINAL DISCOVERERS OF AMERICA, ENTITLED TO CREDENCE?—If "Vinland" was discovered in the tenth century, what particular latitudes and longitudes of North America are we to understand by this term?

298. WHAT IS THE CHARACTER AND PURPORT OF THE ANCIENT INSCRIPTION FOUND ON THE DIGHTON ROCK, ON THE BORDERS OF MASSACHUSETTS AND RHODE ISLAND?—Is this inscription in the Runic or any other ancient character, in part, or altogether; or is it *sui generis* with the devices and picture-writing of the North American Indians, referred to by No. 245.

299. DID THE PHOENICIANS, OR ANY OTHER PEOPLE FROM THE MEDITERRANEAN, FURNISH ANY ELEMENT IN THE ANCIENT INDIAN POPULATION OF AMERICA?—Is there any affinity between the Iroquois and Greek languages?

300. IS THERE ANY ASIATIC WORD OR WORDS NOW IN USE BY ANY OF THE AMERICAN TRIBES?—What is the origin of the Aztec word "peon?" What are the elements of their name for the Deity, "teo-tl?"

301. DO WE DERIVE THE TERM ALLEGHANY FROM AN ANCIENT PEOPLE CALLED ALLEGHANS?—Are there any other words of their language remaining in our geography? State them, with their etymology.

302. WHO WERE THE ERIES?—Have we reason to suppose that we may recognise, under this name, the Kahkwas of the Iroquois, or the lost "neuter nation," of the French writers?

303. WHAT TRIBE ARE WE TO UNDERSTAND BY THE TERM "FIRE NATION?"—Is this a synonym for any of the existing western tribes? Were they of the group of the Algonquin tribes, or of a different stock, who were expelled by them?

304. IS THE WORD OREGON AN INDIAN TERM?—If so, in what language, and what are its syllabical elements and meaning? Was it employed, by writers, prior to the time of Carver?

305. IS THE INSCRIPTION FOUND ON OPENING THE GRAVE CREEK MOUND, IN WESTERN VIRGINIA, IN 1839, ALPHABETIC OR HIEROGLYPHIC?—If alphabetic, in what ancient character was it executed, what is the purport thereof, and what bearings has it on the early epoch of American history? Furnish an authentic copy of the inscription, with its interpretation, if known.

306. CINCINNATI ANTIQUE STONE.—What objects are depicted on an antique ornamented stone found in a mound in the town plat of Cincinnati in 1840? Are these ornaments in the Yucatanese style?

307. AT WHAT TIME, AFTER THEY BECAME ACQUAINTED WITH THE GULF OF MEXICO, WAS THE MOUTH OF THE MISSISSIPPI FIRST DISCOVERED BY THE SPANISH?—What name did they bestow on it; what terms were bestowed by others, and in what manner has the present term of Mississippi come to prevail? Is this an Algonquin phrase, and if so, what are its elements?

308. WERE THE EVIDENCES OF ANCIENT CIVILIZATION CONFINED TO TRIBES LOCATED AROUND THE GULF OF MEXICO? — Do the articles and fragments of ancient earthenware, found at Appalachicola Bay, and at other places, in Florida, denote a degree of skill in that art superior to that known to have been possessed, by the northern tribes, on the planting of the colonies?

309. WHAT ORIENTAL CUSTOMS ARE DENOTED BY WESTERN ANTIQUITIES? — Articles of antique pottery have been found in Tennessee, which are stated to denote the existence of the Phallic worship among the ancient tribes who inhabited the precincts of that state. What are the facts on this head; and do they receive countenance from discoveries in other quarters?

310. ARE THERE ANY AFFINITIES BETWEEN THE CARIB AND NORTH AMERICAN DIALECTS?

311. TRIBAL ELEMENT OF ANCIENT CIVILIZATION? — Are the reports we have in Humboldt, which are renewed by later writers, of a tribe of White Indians, called Moques or Mocas in the north-western parts of Sonora, founded on truth, and what are the features, habits, and arts of this people? Do this tribe possess blue eyes, flaxen hair, and a white skin? Do they build stone-houses, raise large herds of cattle, and grow and spin cotton?

312. TRIBES OF NEW MEXICO. — What are the character, habits, and state of industry of the Navihoes, Jicarillas, Utahs, Kayaguas, and other native tribes of this intendency?

313. INDIANS OF OREGON. — What are the principal facts respecting the numbers, names, and groups, of these tribes? Are there any analogies between the ancient languages of Mexico or California, and the Pacific tribes in the vicinity of Nootka Sound? And are the tribes of the Columbia Valley, as they are represented to be, destitute of the knowledge of a God, and otherwise degraded in their intellectual character, below those generally located east of the Rocky Mountains?

314. WAS AMERICA KNOWN IN THE FIFTH CENTURY, AS IS NOW SAID, IN THE BIBLIOTHETICAL CIRCLES OF GERMANY, ON THE AUTHORITY OF CHINESE WRITINGS?

LANGUAGE.

315. WHAT ARE THE GRAMMATICAL PRINCIPLES OF THE LANGUAGE? — Do these principles correspond with the ancient or modern class of languages? If with the ancient, with what family, and in what particulars, do resemblances or affinities exist? Are the words simple or compound? If compound, or compound derivatives are used, what are the rules by which these compounds are effected?

316. IS THE VOCABULARY OF THE LANGUAGE FOUNDED ON GENERIC ROOTS OR PRIMARY FORMS WHICH COALESCE WITH ADJUNCTS, IN THE UTTERANCE? — Are these roots numerous? Are they monysyllabic or dissyllabic? Do they express the primary senses of motion, existence, and action, quality, and position, without their relation to objects or persons?

317. WHAT IS THE PROCESS OF SYLLABICAL ACCRETION? — Does more than one substantive and one verb enter into the new compound? If two or more words coalesce, do they both retain their quota of syllables, or are some dropped, or thrown away? What are the rules of this process of discarding syllables? Which syllable is invested with the primary meaning? Give examples of the mode of coalescence.

318. HAVE THE VERBS AND SUBSTANTIVES POWER TO ABSORB INTO THEIR TEXTURE, PRONOUNS, PREPOSITIONS AND ADJECTIVES? — If so, does not a word become highly concrete, descriptive, and pollysyllabic, exhibiting rather the force and meaning of an entire sentence?

319. WHAT LAWS OF CONCORD GOVERN THE USE OF SUBSTANTIVES? — Have they variations of form to designate number, gender, and case? How is the plural formed? Is there any dual number? Is there a limited and an unlimited plural, or an inclusive and exclusive plural? Have substantives any inflection to denote the animate or inanimate class of objects?

320. GENDER. — Is there a masculine, feminine, and neuter gender? If the sex of objects require no concords, to what principle of distinction do the inflections of transitive verbs and nouns point? Is the arrangement of matter and masses into animate and inanimate kingdoms observed? By what inflections of the substantives are these classes denoted? Do nouns, animate or inanimate, require verbs animate or inanimate, and *vice versâ?*

321. WHAT ARE THE PRINCIPAL CHANGES OF FORM OF SUBSTANTIVES? — Are they declined to form cases? Are they susceptible of local and of adjective inflections? Does the noun precede, or follow the verb? Do they say 'give me food,' or 'food give me?' Are substantives converted into verbs, and how?

322. WHAT ARE THE LAWS OF ACCIDENCE OF VERBS? — Do verbs consist of ground forms, which indicate independent or generic action, passion, or existence? How are these forms varied to denote person and object? How, in the incorporation of pronominal elements, is the actor distinguished from the object? How many moods, tenses, and voices have they? Can they be conjugated positively and negatively? Is there any true infinitive in the spoken dialect, or how is the infinitive denoted? Are there participles? Are verbs formed from nouns? How are the verbs to speak, to dance, to cry, converted into speaker, dancer, cryer? Conjugate the verbs to love, to see, to burn, through the various moods and tenses.

323. DO ADJECTIVES, AS WELL AS VERBS AND SUBSTANTIVES, OBEY THE GRAMMATICAL DISTINCTION OF ANIMATE AND INANIMATE? — Are the words good and bad, black and white, varied in their terminations to denote the generic classes of objects to which they are applied? Cannot the same adjective term be applied to a man and a rock? Are adjectives declined for comparison? How do they denote the degrees of comparison? If adjectives are not varied for degrees, how is precision imparted? Do substantives admit of adjective inflections, by which the use of a governing adjective is obviated? In the terms a good man and a good gun, need the words man and gun be separately employed? Describe the rule, with its transitions and variations.

324. HOW MANY PRONOUNS HAS THE LANGUAGE? — Are there personal, relative, and demonstrative pronouns, and how many of each, and in what manner are they varied in the plural? Is there any pronoun *she*, as contradistinguished from *he?* Is the number of the third person always indefinite? Are there two plurals for we, founded on the principle of the inclusion or exclusion of the person addressed? How is the Deity addressed under the operation of this anomalous rule?

325. ARE PRONOUNS SUSCEPTIBLE OF INFLECTIONS FOR TENSE, NUMBER, OR TRANSITIVE OBJECT? — In what manner are they varied, and how is the past and future distinguished from the present? Can they be further varied to denote the oblique tenses? Is there more than one class of personal pronouns; and if so, how do the personal prefixed pronouns differ from the suffixes?

326. HAS THE LANGUAGE PREPOSITIONS? — If so, are they employed disjunctively, or as independent parts of speech, as heard in by, to, in, with, if, from, through, or are these senses expressed by inseparable particles, or by alphabetical signs? How is precision given to the phrases, in the water, by the rock, on the tree?

327 WHAT IS THE NUMBER AND CHARACTER OF THEIR ADVERBS? — Can the Indians express the sense which, in the English language, is conveyed by the inflection *ly*, as heard in badly, rapidly? In the phrases, stand up, lie down, go there, how do the verbs differ from their ordinary forms in the singular of the indicative or imperative present? What are the forms of yes and no?

328. IS THERE A DEFINITE AND AN INDEFINITE ARTICLE? — How is the want of a definite article supplied? It will be necessary, in examining the subject of the definite article, in the Indian dialects, to guard, on the part of interpreters, against the use of pronouns, in this supposed sense. It is also important to decide whether the indefinite article, where it is given, does not strictly denote the number *one*, and not *an;* and to be sure that the sense of the expression employed is not *an* animal, &c., but *one* animal, &c.

329. CONJUNCTIONS. — How many conjunctions have the Indians? Give the common equivalents for the words, and, nor, neither, but, &c., together with the manner in which their equivalents in the Indian dialect, under your examination, are employed. Are there chronological conjunctions?

330. INTERJECTIONS. — Does the language abound in exclamations, and does this part of speech partake of the anomalous transitive character which marks the other forms? If an Indian exclaim lo! in relation to a man, and lo! in relation to a country, are the equivalents for the word lo! the same? Are there any differences in the interjections used by males and by females? Is the word for alas! the same in both cases?

331. IS THERE A SUBSTANTIVE VERB IN THE LANGUAGE? — And, if so, what are its elements? Can the Indians say, I am, he is, they are, &c., in a generic or elementary sense, and as declarative of independent existence? If the word exist, as the radix *Iau* is stated to, in the Odjibwa dialect of the Algonquin, does the rule separating the grammatical forms of the language into animate and inanimate classes apply to it? Is the word *Iau*, in the dialect referred to, a verb substantive animate, and *Iëë*, a corresponding verb substantive inanimate? Are there analogous forms in the language known to you, and how are these words conjugated? Are the conjugations based on one root, or, as in the Latin *sum*, on several? If an equivalent for the English verb *to be* exist, is it generally employed in the expression of sentiment or passion in conversation, or is its use limited to an object or objects not present to the senses, or which are deemed mysterious or unknown? Does an Indian say, I am sick, I am well, I am glad, I am sorry, or are the several expressions, in these cases, without any declarative syllable, as a prefix or suffix to, or incorporated into the texture of the verbs to be sick, or well, or glad, or sorry, by the absence of which declarative forms, the terms would be, literally, I sick, I well, I glad, I sorry?

332. HOW ARE ACTIVE DISTINGUISHED FROM PASSIVE VERBS? — I carry, I am carried. I lift, I am lifted. I strike; I am struck. I burn; I am burned. Vary the persons which alternately affect actors and objects of action, so as to exemplify the rule.

333. DERIVATIVE COMPOUND VERBS. — Are active verbs made up, in part, of the generic word in the language for existence, or for the property of independent vitality? Is there a corresponding generic root in neuter or passive verbs?

334. GROUND FORMS OF THE SUBSTANTIVES. — Are the nouns based on a stock of generic particles, implying various grades of matter, in inert or active forms? If so, what are the terms, respectively, of liquid, solid, light, heavy, aerial, or metallic, animal, vegetable, or mineral matter? In analyzing the language, endeavor to eliminate these radical words or particles from their concrete forms. Nothing can tend more conclusively to throw light on the structure of the language, than this process of syllabical analysis, and it is desirable that you should apply it also to the verbs and to other forms of speech. The Indian languages differ so essentially from those best known to us, that we should constantly suspect them to be reproductions of old languages, in which the original radices are hid under a set of combined grammatical forms, which are, after all, very simple.

335. ARE THERE ANY REDUNDANCIES OF FORMS? — Such redundancies have been found in the tensal inflections of pronouns wherein the verbs are supplied with the very same inflections, as if we should say, *I did—love did*; or, *I will—hate will*. It is found in some of the languages, that both substantives and pronouns and verbs must, in order to agree, have the same plural inflections for number, by which a species of verbiage or tensal tautology occurs, as if we should use expressions such as these: the birds—they approach—do; or, he or they did go—did; instead of simply, the birds approach or he or they went. It is also found that possessive pronouns require possessive inflections in their nouns in regimen, and the expressions are, literally, in these cases, my horse—mine; his dog—his; and not, as in English, my horse, his dog. These forms have the cast rather of an ill-digested and crude language, and not one which, according to the general and most approved impressions, exists in a very perfect state. Please extend this inquiry to all apparent redundancies of form.

336. HOW IS DECLARATIVE OR PASSIVE EXISTENCE PREDICATED OF ANOTHER IN THE USE OF A NOUN, CHANGED TO A VERB, WHOSE ACTION IS TRANSFERRED TO ONE'S SELF? — In what manner is the substantive invested with the power of a verb? There is a bear; I am a bear. A horse; I am a horse. God exists; I am a God.

337. How are Substance and Motion, Quality and Position, denoted in concrete Words, without the separate Use of the Elements of Speech essential to such Expressions in the English Language? — A leaf moves, a bird flies, a canoe glides; a dry leaf moves, a blackbird flies, a white canoe glides; a small dry leaf moves, a great blackbird flies, a beautiful white canoe glides; a small dry leaf moves on the tree, a great blackbird flies in the air, a beautiful white canoe glides down the stream. How far can this process of combination and accretion be carried? May other senses besides these, be added to the original noun, by inflection, or the transfusion of syllables or alphabetical signs?

338. What Forms can Substantives or Verbs take to denote Possession, or the Object possessed? — Is there a possessive inflection in the first and second persons? How is this affected, if affected at all, by an objective particle or inflection in the third person?

339. Agreement in Number. — In English Grammar, nouns singular govern verbs plural. A man walks, men walk; a robber shoots, the robbers shoot. Is the rule similar in the Indian, or is it directly the reverse? Do they say, a man walk, men walks? thus requiring, in all cases, singular to singular, and plural to plural?

340. How many Moods are Provided for by Inflections of the Verbs? — In what manner are the indicative and infinitive formed? Is there, in the verbal forms, any of greater simplicity than the third person singular? Is there an interrogative mood?

341. Are there Inflections for Past Tense, added to Deceased Persons' names to indicate their Death? — State the rule which is said to govern this delicate practice of allusion to the dead, in some of the dialects.

342. Are there any Words of a Sexual Character, or which are Exclusively Used by Males and Females? — The Carib language denoted anomalies of this kind, and there are traces of the principle in some of the northern languages.

343. Is the Language Adapted to the Purposes of Christianity? — Have translations of the Scriptures been made in it, and if so, what portions of the Old or New Testament have been translated and printed; and what degree of precision, force and exactitude has been attained? Is the language as well adapted to the disquisitive and argumentative style of the Epistles, as to the Gospels, and narrative portions? Has the language been well and characteristically brought out in these translations, or has the literal verse by verse system, seeking equivalents for verbal terms which are shielded under the concrete forms, loaded the pages of the translations, as has been noticed in some instances, with unnecessary verbiage and redundancies? Is there a word in the language for "virgin," as contradistinguished from "maid," and "young woman"—a point upon which its capacity to narrate accurately the incarnation turns? Inquiries of this character will tend to illustrate and explain the principles of the language, and are important in judging of the literary value of what has already been effected, on the frontiers, in this way.

344. Is the Language adapted, to any extent, and, if so, to what extent, to the purposes of History, Poetry and General Literature? — What is the relative space occupied by parallel passages of Indian and English? Take, for this purpose the parable of Nathan, and the Lord's prayer. If the principles of the amalgamation of words tend to the concentration of sounds, it is reasonable to anticipate that brevity in the annotation, or written characters, should follow. If it does not, in what *other* manner is the language adapted to the purposes of literature?

345. Is the Vocabulary Copious? — Can it readily express, or furnish equivalents for, foreign words? Are there any sounds in the English alphabet which it cannot express? Is gesticulation essential to carry out some of its meanings? Does it appear to be homogenous in its origin, or does it exhibit a mixture of other and dissimilar stocks, domestic or foreign?

346. Is the Radix of the Noun and Verb generally a Monysyllable? — Can you furnish a vocabulary of one hundred specimens of the radical forms of verbs, nouns, or other primary parts of speech? It is suspected, from their capacity of concrete expression, that the North American languages are founded on a limited number of elementary roots, of a general or abstract character, which derive precision, not from radical changes of sound, but from relative position, permutation, elision, or expansion. The ear, and the ear alone, is manifestly the principal guide. The art, which a child early learns by practice, and which appears to require but little power, inductive analysis it is conceived, may reach and explain.

347. What is the State of their Vocabulary? — Place the Indian opposite the English words in the following vocabulary. It is essential to the purposes of comparison that plurals and pronouns should be omitted, or carefully noted, wherever they are employed.

1. God.
2. Devil.
3. Angel.
4. Man.
5. Woman.
6. Boy.
7. Girl, or maid.
8. Virgin.
9. Infant, or child.
10. Father, my.
11. Mother, "
12. Husband, "
13. Wife, "
14. Son, "
15. Daughter, "
16. Brother, "
17. Sister, "
18. An Indian.
19. A white man.
20. Head.
21. Hair.
22. Face.
23. Scalp.
24. Ear.
25. Eye.
26. Nose.
27. Mouth.
28. Tongue.
29. Tooth.
30. Beard.
31. Neck.
32. Arm.
33. Shoulder.
34. Back.
35. Hand.
36. Finger.
37. Nail.
38. Breast.
39. Body.
40. Leg
41. Navel.
42. Thigh.
43. Knee.
44. Foot.
45. Toe.
46. Heel.
47. Bone.
48. Heart.
49. Liver.
50. Windpipe.
51. Stomach.
52. Bladder.
53. Blood.
54. Vein.
55. Sinew.
56. Flesh.
57. Skin.
58. Seat.
59. Ankle.
60. Town.
61. House.
62. Door.
63. Lodge.
64. Chief.
65. Warrior.
66. Friend.
67. Enemy.
68. Kettle.
69. Arrow.
70. Bow.
71. War-club.
72. Spear.
73. Axe.
74. Gun.
75. Knife.
76. Flint.
77. Boat.
78. Ship.
79. Sail.
80. Mast.
81. Oar.
82. Paddle.
83. Shoe.
84. Legging.
85. Coat.
86. Shirt.
87. Breechcloth.
88. Sash.
89. Head-dress.
90. Pipe.
91. Wampum.
92. Tobacco.
93. Shot pouch.
94. Sky.
95. Heaven.
96. Sun.
97. Moon.
98. Star.
99. Day.
100. Night.
101. Light.
102. Darkness.
103. Morning.
104. Evening.
105. Mid-day.
106. Mid-night.
107. Early.
108. Late.
109. Spring.
110. Summer.
111. Autumn.
112. Winter.
113. Year.
114. Wind.
115. Lightning.
116. Thunder.
117. Rain.
118. Snow.
119. Hail.
120. Fire.
121. Water.
122. Ice.
123. Earth.

124. Sea
125. Lake.
126. River.
127. Spring.
128. Stream.
129. Valley.
130. Hill.
131. Mountain.
132. Plain.
133. Forest.
134. Meadow.
135. Bog.
136. Island.
137. Stone.
138. Rock.
139. Silver.
140. Copper.
141. Iron.
142. Lead.
143. Gold.
144. Maize, or corn.
145. Wheat.
146. Oats.
147. Potatoe.
148. Turnip.
149. Pea.
150. Rye.
151. Bean.
152. Melon.
153. Squash.
154. Barley.
155. Tree.
156. Log.
157. Limb.
158. Wood.
159. Post.
160. Stump.
161. Pine.
162. Oak.
163. Ash.
164. Elm.
165. Basswood.
166. Shrub.
167. Leaf.
168. Bark.
169. Grass.
170. Hay.
171. Nettle.
172. Thistle.
173. Weed.
174. Flower.
175. Rose.
176. Lily.
177. Bread.
178. Indian meal.
179. Flour.
180. Meat.
181. Fat.
182. Beaver.
183. Deer.
184. Bison, or buffalo.
185. Bear.
186. Elk.
187. Moose.
188. Otter.
189. Fox.
190. Wolf.
191. Dog.
192. Squirrel.
193. Hare.
194. Lynx.
195. Panther.
196. Muskrat.
197. Mink.
198. Fisher.
199. Marten.
200. Mole.
201. Polecat.
202. Hog.
203. Horse.
204. Cow.
205. Sheep.
206. Turtle, or tortoise.
207. Toad.
208. Snake.
209. Lizard.
210. Worm.
211. Insect.
212. Fly.
213. Wasp.
214. Ant.
215. Bird.
216. Egg.
217. Feather.
218. Claw.
219. Beak.
220. Wing.
221. Goose.
222. Duck.
223. Swan.
224. Partridge.
225. Pigeon.
226. Plover.
227. Woodcock.
228. Turkey.
229. Crow.
230. Raven.
231. Robin.
232. Eagle.
233. Hawk.
234. Snipe.
235. Owl.
236. Woodpecker.
237. Fish.
238. Trout.
239. Bass.
240. Sturgeon.
241. Sunfish.
242. Pike.
243. Catfish.
244. Perch.
245. Sucker.
246. Minnow.
247. Fin.
248. Scale.
249. Roe.
250. White.*
251. Black.
252. Red.
253. Green.
254. Blue.
255. Yellow.
256. Great.
257. Small.
258. Strong.
259. Weak.
260. Old.
261. Young.
262. Good.
263. Bad.
264. Handsome.
265. Ugly.
266. Alive.
267. Dead.
268. Life.
269. Death.
270. Cold.
271. Hot.
272. Sour.
273. Sweet.

* Denote whether the adjective be animate or inanimate; put an, for the first, and in, for the second.

274. Pepper.
275. Salt.
276. Bitter.
277. I.
278. Thou.
279. He.
280. She.
281. They.
282. Ye.
283. We, (inclusive.)
284. We, (exclusive.)
285. This, (animate.) / This, (inanimate.)
286. That, (animate.) / That, (inanimate.)
287. These, (animate.) / These, (inanimate.)
288. Those, (animate.) / Those, (inanimate.)
289. All.
290. Part.
291. Who.
292. What. / What person. / What thing.
293. Which person. / Which thing.
294. Near.
295. Far off.
296. To-day.
297. To-morrow
298. Yesterday.
299. By and by.
300. Yes.
301. No.
302. Perhaps.
303. Never.
304. Forever.
305. Above.
306. Under.
307. Within.
308. Without.
309. Something.
310. Nothing.
311. On.
312. In.
313. By.
314. Through.
315. In the sky.
316. On the tree.
317. In the house.
318. By the shore.
319. Through the water.
320. To eat.*
321. To drink.
322. To laugh.
323. To cry.
324. To love.
325. To burn.
326. To walk.
327. To run.
328. To see.
329. To hear.
330. To speak.
331. To strike.
332. To think.
333. To wish.
334. To call.
335. To live.
336. To go.
337. To sing.
338. To dance.
339. To die.
340. To tie.
341. To kill.
342. To embark.
343. Eating.
344. Drinking.
345. Laughing.
346. Crying.
347. To be, or exist.
348. You are.
349. He is.
350. I am that I am.

348. ARE YOU ACQUAINTED WITH ANY MATERIAL ERRORS IN THE GENERAL OR POPULAR ACCOUNTS OF OUR INDIAN TRIBES? — If so, please state them.

In submitting the preceding queries on the several subjects named, it is not designed to limit the inquiry to these particular forms. Called upon, by the terms of the act, to embody materials illustrative of the history of the tribes, as well as their statistics, the Department seeks to avail itself of the knowledge and experience of persons in various parts of the country, to contribute their aid. The inquiry is here placed on a broad basis, that it may embrace the general grounds from which we are to judge the history and condition, past and present, of the people whose benefit is sought by future legislative provision; and by the adoption of a course of public policy which shall best subserve the highest interests. It is not supposed that every person who sits down to answer these queries, whether he be in a public or private capacity, will take an equal interest in them, or feel equally prepared, with facts and observations, to reply to all. By denoting the general line of inquiry, and running out the leading questions a little into detail, enough has been done, it is conceived, to serve as hints to the respondents, and little more is, indeed, intended. Facts are sought, and nothing but facts. It is essential that, where the respondent is unknown to the Department, some reference should be given. Many of the inquiries relate to customs and opinions which are believed to be common to most of the tribes; but the excepted cases are important to be noted, and in these cases simple affirmative or negative replies will often be sufficient. Where new facts are stated, or new opinions expressed, which are founded on personal knowledge or study, in any branch of the subject, it is of moment that they should be well vouched. Hitherto inquiries of this kind have been chiefly in the hands of casual visitors or travellers in the Indian country, often of foreigners, who have necessarily taken hasty and superficial glances at their mere external customs and ceremonies. Of the more abstruse view of Indian character — of their religion, tribal government and clanships, their thoughts on

* If there be no infinitive to verbs, insert the simplest concrete form here, as, he eats, he drinks, &c.

death and immortality, their mental capacities, and the leading causes of their action, very little has been observed, which possesses the character of research, while there are essential points of discrepancy. But whatever degree of imperfection has characterized these desultory and casual efforts in describing the Indians, and however much cause we may have had to dissent from some of the conclusions and criticisms respecting our treatment of, and policy towards them, drawn by tourists from abroad, or by over-zealous but mistaken observers at home, it is essential to the just discharge of the duty imposed on the Department, in the present effort, that exactitude should stamp its labors. I will therefore thank you to inquire carefully, and be sure that no deception has been practised. In all questions where the interests of the tribes clash with those of the persons whom you may consult, there is much caution required. There is great prejudice of opinion, and preconception of the Indian character, generally. It is due to them that they should be judged candidly, and from an examination of opinions and statements from the best sources. A few examples of the misconceptions referred to, will be mentioned. It was stated a few years ago, by one of the most popular writers of England, that the United States had borrowed money, in 1837, from a wealthy Indian chief, to pay its annuities to his tribe! and its policy has been deeply censured, in high quarters, in the foreign literary world, on the bases of books of travels, whose least severe censure it is believed to be, to declare, that their authors have relied, in some instances, on hastily gathered, or ill-digested, or unworthy materials. One writer represents the Mandans as practising the arts of self-torture of Hindoo devotees, by hanging from hooks, or cords fastened into the nerves, so as to sustain the whole weight of the body. This, together with the general account of the Mandan religion, by the same author, is contrary to the facts, as understood here. The same writer will also have this tribe to be descendants of the Welch, who are supposed to have reached this continent in the twelfth century. Yet the British Druids imposed no such self-torturing rites.

Much inexactitude and uncertainty exist with respect to the class of evidences to be drawn from the antiquities of the area of country now composing the United States. To illustrate this topic, in the Indian history, exact plans and descriptions are required. The state of their traditions is ill-explored, on most of the topics embraced in title V. Their general history and languages, constitute a wide field for remark. The whole subject is one of interest, and in giving the inquiry official sanction, it is designed to collect and prepare a body of facts, which shall present the customs, character, and institutions of the tribes in the simple garb of truth.

THE END.

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